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13th Annual

S.A.M-A.S.M.E

MANAGEMENT ENGINEERING Conference

April 24-25

Hotel Statler

New York City

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The Pitfalls In Managing A Small Business
W. H. Kuehn

Simulation: Versatile Aid To Decision-Making
S. Reed Calhoun and Paul E. Green

What Is Human Relations?
Alan C. Filley

Is Your Problem Overproduction — Or Underproduction Of Markets?
James G. Drury

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Society for Advancement of Management

ANNUAL SOUTHEASTERN REGIONAL MANAGEMENT CONFERENCE

May 8-9 1958 • Mountain View Hotel-Huff House • Gatlinburg, Tennessee

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Communications

WE HEAR a lot these days about the need for two-way communications. This refers to communications from the bottom up, as well as from the top down. We hear how important it is to keep people fully informed on things of interest and concern to them. This is, of course, of particular importance to people in the managerial organization.

Indeed, we spend a lot of time perfecting the mechanics of communications. We have carefully defined report procedures, committee meetings, house organs, and a host of other means of transmitting information. Yet we often hear people say that they are not kept properly informed, and evidence that effective communications is not taking place is quite common. As a matter of fact, the more thoroughly we study the process of management, the more we can become convinced that most of our problems are really problems of communications!

A number of years ago I knew of a company that had installed a Multiple Management Plan involving a variety of boards and committees which were given broad responsibility for planning and execution. These groups were representative of every division of the company and virtually every level of management. They met regularly and deliberated at great length. Here was a situation which, from the viewpoint of the mechanics of communications, should have been just about perfect. Yet, in the bull sessions which took place after the meetings, there were countless complaints over the poor communications which existed.

It is evident that we must go beyond mechanics in order to have effective communications. We must recognize that the process of communicating is tremendously complex. We must appreciate the difference between saying something which is clear to us and having our words really understood by others. We think we communicate largely through the written and spoken word, yet our understanding of words is so dependent upon our own personal experiences and the shades of meanings which we attach to them. Also, we have come to realize that what we intend to communicate is often influenced by which side of the fence we are on!

In a broad sense, it is certainly basic that good communications depends upon the existence of mutual confidence and trust. The atmosphere in which communications is to take place then is all important. If we can create an atmosphere where people feel that they can express themselves freely, we have laid the foundation for effective communications.

H. E. Lunken
S.A.M National President

The Pitfalls In Managing A Small Business

by W. H. Kuehn

Director of Education,
Dun & Bradstreet, Inc.
New York

WE ARE STILL a nation of small business people, and we are a nation in which there is continual churning among business concerns. Every day enterprises are discontinued, and every day new businesses spring up to close the ranks. The 2,650,000 businesses today are not all the same businesses of last year.

Among the smaller concerns today *close to 20% will have discontinued by the end of a year.* With high hopes new people will come in, but many of these, too, will fade in time.

Discontinuances are the result of many things: reasons of health, changes in family situations, and what seems to be better opportunity working for someone else. These are voluntary decisions to quit.

There are, however, other discontinuances which are the result of inability or failure to make the business click. Things just don't work out. These are the failures.

But there are two kinds of failures. There is the failure that ends up in the court or with loss to creditors. There are very few of those in the United States. In 1956, there were only about 12,700 such failures. These are the "formal" failures.

The other kind of failure is the more important—the failure where the man puts his savings into a business and losses wipe out his savings. Creditors don't suffer; the businessman uses his *own* invested capital to absorb losses and to pay off what he owes. He packs up, closes the door, and says, "That's the last time I ever try starting a business of my own."

It is a disappointment, a heartache. But the cause in either type of failure can be directly traced to one or more of the pitfalls discussed in this booklet.

If we can look ahead and see the pitfalls that cause failure, trouble may be avoided.

The man who has been through the mill is the one most likely to know about the danger spots in the operation of a business. We have a high regard for men who *know* business because they are *in* business. Since our reporters call on many business people, we asked our men in many different sections of the country to inquire of businessmen what they regard as the major pitfalls.

They asked two questions. The first...

"If you were giving advice to people going into business, what would you consider a pitfall, the thing that must be guarded against and overcome?"

That was the *general* question. Then, because a man's comment about his own experience is usually more valuable than general opinion, reporters asked this *specific* question . . .

"Is there anything in the early history of your own *business which proved a pitfall?"*

The reports which came in indicate that there are at least nine things that can prevent success. Businessmen, large and small, agreed that pitfall Number One is *lack of experience.*

After graduating from the Wharton School of the University of Pennsylvania, Mr. Kuehn went into the Philadelphia office of Dun & Bradstreet. In 1945 he joined the New York headquarters office of that firm and is now Director of Education, and his primary activity is the training of 1,600 reporters who call upon business people throughout the United States. In addition to his work with Dun & Bradstreet Mr. Kuehn lectures on business problems for various universities, lecturing regularly at the Graduate School of New York University. He is a faculty member at the Graduate School of Banking of the South.

Pitfall 1. Lack of Experience

Everyone says, "Sure you have to have experience." To be successful in textiles you need to work in textiles. To be successful in construction, work in the building trades.

But the problem is more complex. It

is not only the *time* spent but what was learned. What were the duties performed? What responsibilities were discharged? *The amount of experience required for success varies with the type of operation.* There's a man in New York who says his headaches never started until he was five years in business. He had enough personal experience in his own textile line. He was a capable worker on his own. It was only when he started to build an organization that he learned that his experience did not extend to management through others. He had to learn how to delegate many of the jobs he once did by himself.

FROM what businessmen report, what is needed is not just experience but "balanced" experience. They say you need . . .

1) Knowledge of buying. 2) Knowledge of your products. 3) Knowledge of how to get customers—selling. 4) Knowledge of the handling of finances.

Apparently a big stumbling block is buying. A plumbing supplies wholesaler says:

"The golden bit of advice a businessman can give a beginner is 'get experience.' Due to the ever increasing competition in this line even the new man must be thoroughly familiar with all the aspects. Buying ability is the key-note, plus a thorough knowledge of what his customers want."

A manufacturer of screw products explains:

"To go into this business you need both enough money and know-how. The first trouble I encountered was in the correct buying of machinery."

Even having varied experience doesn't mean it's the right kind. Experience in sales can be of two kinds: easy selling and hard selling. A wholesaler of hardware told us how he learned "hard" selling:

"I started this business immediately after the second World War, in a sellers market. First difficulty I encountered, and I almost floundered, was the conversion to the buyers market. I found that you actually had to cater to the customer instead of merely placing the merchandise on the counter. Although the sellers market is long dead, it continues to linger hopefully in many new businessmen's minds. I remember right after the transition to the competitive type of marketing, I couldn't understand why customers would enter my store, stand around for a few minutes and then leave. It was quite a while before I learned that you had to adopt a more positive, aggressive attitude and go to the customer. As soon as I started greeting the man when he came in the door, showing him quality merchandise and attempting to sell him, I was once more doing OK."

Knowledge of one business is not always adequate experience for a new line as this man frankly puts it:

"In 1947, I was president of a novelty manufacturing concern. We had made a lot of money during the war; but there was little demand for our products in 1947. We had $200,000 cash. I took a quick look ahead and decided we would manufacture ranges. I bought out the other stockholders with part of that cash, and plunged right in. Shortly thereafter, rising costs and decreasing prices, due to competition, took the rest of my cash, and another $200,000 besides. Then creditors took the manufacturing plant. Moral? There is no substitute for experience."

Pitfall 2. Lack of Money

Businessmen tell us lack of adequate starting capital is the Number Two pitfall.

What about capital? In the 1930's it was not uncommon for the new businessman to start with $1,000. They were pretty small businesses, but you *could* get started with $1,000. Some still like to cling to the old sentimentality that you can start a business with nothing and work your way up.

In establishing a business, it is not too difficult to figure the amount of capital needed. Here are the steps.

(1) You first figure the EXPENSES carefully. Calculate how much for rent, light, advertising, as examples, and add a salary for yourself. There you have your basic minimum expenses. Then arbitrarily add 25%, maybe 50%. The expenses always seem to run more than expected. Don't ask why that happens. Business people tell us that no matter how you figure the expenses, they seem to run higher.

(2) Now, the next question is what SALES do you have to have to cover those expenses? Suppose you have a gross profit margin of one-third. If you do $6,000 a month, you'll get a gross profit of $2,000 on which you will just break even if your basic expenses are $2,000. There's no profit involved; you'll just cover your expenses.

(3) Now, when you know that your sales must equal $6,000 a month or $72,000 a year to break even, then and then only, can you begin to ask yourself, "What merchandise do I need to do this volume? What receivables must I carry if I am to sell on credit? What fixtures do I need?" In other words, what capital is needed to produce the sales, which in turn will give the gross profit to cover expenses and a reasonable living?

These calculations should be written out on a piece of paper very, very carefully before you ever sign anything.

A retailer of paints writes:

"I have only been in business since May of 1956, but my main concern has been the lack of working capital. I felt that at the outset an investment for a paint service store of around $3,000 was sufficient, but I find that although I have an excellent background for this type of business, the type of inventory carried is very diversified. I also have found that when I was in business prior to World War II, I never ran into too much difficulty in my operations. Since the end of World War II, business methods have become more and more complicated."

A woman retailing women's wear says:

"Anyone going into business now without plenty of capital in back of him should have his head examined."

That it may take years to overcome lack of capital is apparent here:

"The first pitfall I encountered was of simply not having enough money. For my first several years I was forced to resort to borrowing money from banks and friends, with the resulting loss of profits through interest rates. I progressed from borrowed funds to special terms with my suppliers, but still sacrificed profits through loss of discounts. It was many years before I finally reached the position where I could operate on my own money, and earn my discounts."

With it all, capital deficiencies can

be overcome if there is enough drive. A manufacturer of tools and dies shows how plain hard work did the trick:

"When my partner and I started the business five years ago, we actually started in the hole. Both of us borrowed $2,000 for our initial money and as a consequence were $4,000 in debt from our first day of operations. We soon found that we could not be 'executives' in this position. We had no employees and had to run the machines ourselves. During those first few months there were times when we went forty-eight hours without getting home. One of us would run the machine during the day while the other went out and made sales. Then the two of us would work during the night trying to produce the materials to be sold. We managed, in time, to work ourselves out of this hole."

Another way out is to cut down on personal living expenses. Capital requirements are lowered if basic expenses are reduced.

"The first difficulty I encountered was having to go without personally. If I didn't, my business would have to go without. However, that sacrifice enabled me to pay all my bills on time, and as a consequence, when business conditions practically forced me to expand, I was able to go for help to my suppliers and get it immediately."

Finally, you can start small and build volume as capital is accumulated:

"I originally sold only hats and gradually, by working hard and carrying the type of hats the trade wanted, volume increased steadily and eventually expanded out into other women's wear lines."

Pitfall 3. The Wrong Location

In the planning of a business, the question of location is important. The cost of that location is rent. Everyone tells you—the textbooks tell you—*don't pay too much for rent.*

But many business men stub their toes because they *don't pay enough rent.*

You can always tell the inexperienced person when he goes into business because he looks for an inexpensive location. You can always tell the really experienced person because the first thing he looks for is a *good* location, and he knows that a good location costs money. He says, "Show me something in the $300 or $350 a month class."

In a city on the Pacific Coast, there's a woman who for years had dreamed of owning her own business. Somebody offered her a location—a very nice little place at $45 a month. So she accepted because she wanted to get an easy start—she didn't want to get in too deep.

Now, nobody wants to go in too deep. But you won't know you're in too deep until a year after you start.

So this lady just put her big toe in. She opened her store and found she was one one of these boulevards where the traffic goes by so fast that no one can possibly stop an automobile. And there sits her store. The $45 was an atrociously expensive rent for that place; $150 for a better location might have been cheap.

Here is what one experienced small business man has to say about the location pitfall:

"I've been associated with some businesses where we rented stores at very low rates. Volume was poor. Almost always a low rent location is a poor bargain for the retailer. The additional rent needed at a more active location is more than paid for by the increased volume."

Here's a manufacturer:

"As a business grows, it should be able to expand, physically speaking, on the land on which it started. It might be well for someone starting in business to put a little more money in land in the beginning."

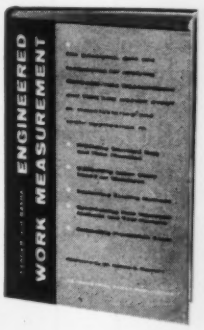
The importance of location, today and in the future, is explained by one man:

"We're boxed in. We built up our sales, now we are gradually losing our customers. They just can't reach us anymore. There's no way to park a car. Do we move or do we give up?"

Rent is a problem. It has to be figured carefully, not only for what it costs, but also for the revenue the location will produce.

Pitfall 4. Inventory Mismanagement

We will move on. The business is now planned. We have the experience, the capital, and the location. We are operating. Now we come into something which we will call control of finances. Really it means knowing how much money you have in your pocket and knowing how to handle it. Control of finances is really just a kind of common sense expressed in dollars.



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It is not only how *much* capital there is; it's how the capital is managed that counts.

Carrying an *improper inventory* is a pitfall. You hear, "Let's not get too much inventory." It's not too much inventory; it's too much of the wrong kind of merchandise. More specifically, it's too much *debt* because the inventory is big for the capital.

Suppose you should have enough stock on hand to last three months. Suppose you put in enough to last you five months, but it sells. You get slow on your bills, but you still sell it. But suppose you put in the five months' inventory and some of it is dead — it doesn't move. Then comes trouble because no cash comes out of the inventory to pay the bills as they fall due.

Here's one businessman's comment:

"They were good salesmen, I'll admit, but they put me in the hole because I didn't buy right."

You may wonder how a "staple" line of merchandise can become obsolete. It did to one man:

"Cotton bags used in the fields by cotton pickers have been a staple item year in and year out. They were made entirely of cotton in former years. No changes occurred in the overall quality or appearance of the cotton bags for about twenty years. Last year, after I bought 500 of this item, a manufacturer introduced a new cotton bag with the body of cotton material and the base made of a more durable plastic. Now everybody wants the bag with the plastic, so I find myself stuck with unwanted merchandise."

And here's the problem from the point of view of a man who has struggled along to be worth over $100,000, *but he is still concerned about having the merchandise on hand that will move:*

"In former years, a merchant could purchase almost any amount of men's khahi pants and he would be able to sell the lot. This is no longer true. Such pants are now styled. Some are made with side patch pockets with snaps, some with elastic in the waist at the back, and some with elastic at each side, some are wide bottoms, and some are pegged bottoms. Not knowing what will sell in your own area can be a serious pitfall."

Pitfall 5. Too Much Capital Going Into Fixed Assets

If you put a dollar into fixtures or into real estate, the chances are that the dollar is going to come out of your working capital, or will be borrowed. The very time that your plant or store becomes bigger and you need *more* working capital is the very time you have *less* of it. Some people get into trouble because they don't anticipate this result.

Let's take an example. A concern has working capital of $100,000 and a nice plant worth $100,00 clear — beautiful situation.

But so many orders are coming in, the management thinks they ought to expand. So a second plant is bought for $100,000 and mortgaged for $50,000.

What happens? Working capital goes down to $50,000.

The concern starts operating. There are now two plants to operate with $50,000, where before there was one plant to keep going with $100,000. There are twice as many employees. When this second plant was built, working capital should have gone up closer to $200,000, than down to $50,000. This is the kind of business that goes along for ten years beautifully, then the management says "conditions" aren't what they should be.

Pitfall 6. Poor Credit Granting Practices

The urge or pressure to sell on credit terms or "put it on the book" is strong. If other stores are granting credit it is hard to lose sales. If competition comes from a low-margin, big-volume cash competitor, the urge is strong to grant a credit service not offered by the cash house.

A credit business can be handled successfully, but before the decision is made to extend credit, ask yourself two questions.

—Do I have enough capital? Roughly an additional capital investment equal to 1½ months' credit sales is needed if selling terms are 30 days. For example, if a store is doing $3,000 a month cash, and this is shifted to credit terms of 30 days, $4,500 additional capital is needed to maintain a comfortable operation. Even if collections are made reasonably promptly about $4,000 or $4,500 will appear as a new Accounts Receivable asset in your statement.

—Do I know how to collect? Credit granting and collecting demands skill. Judgment is needed in opening the credit account, and firm persistence in getting the money in is a must. Some people don't have the skill.

Many of the people interviewed commented that credit granting can be a definite pitfall. One woman in business twenty-five years reports:

"When I first started I also tried to sell on credit but found that I wasn't a good collector, so after several months made all sales for cash and I have since conducted a cash and carry business."

Another business man had this experience:

"Mind you, the class of people I was selling were middle class and upper; I lost less than 1% in bad debts, but when the Texas Liquor Control Board passed the ruling that all accounts payable to wholesalers had to be paid semi-monthly, it limited me. I couldn't extend the credit to my customers and still meet *my* bills every two weeks. I didn't have the capital."

The constructive side of the picture is told by a successful wholesaler of lighting equipment who built up a sound credit business:

"Faced with the competition I had, I deliberately chose to sell individual home owners, and small electrical sub-contractors. Home owners were sold principally for cash and presented no problem. The small electrical contractor, on the other hand, was sold on open account. Most of these were so lightly capitalized that it was necessary to assume some of the financing myself. I, in turn, had to go to the bank and borrow money at least nine months out of the year to support my own receivables. I continue to operate this way even today. Dealing with the smaller accounts and extending them liberal credit is somewhat expensive, but it is more than offset by the fact that I can earn a normal margin and avoid cut-throat price competition."

Pitfall 7. Taking Too Much Out For Yourself

Many new business owners tell us, "We're going to do this right. We're not going to take anything out of the business." But what's the use of going into business if you're not going to take anything out?

The stumbling block, though, is what one man describes as "living too high on the business."

In less prosperous days when earnings declined, the owner and his family tightened up, and their personal expenses came down as the business profits declined.

This is not always true in our present prosperity. The remark was made at a meeting of credit men in Pennsylvania, recently, that in the rehabilitation of a sour account the first thing the credit man generally must *force* on a customer is to cut personal withdrawals that are larger than the business can stand. Maybe a man who can't pay his bills needs one auto, but does he need three?

A retailer came to the market recently to explain his situation to suppliers. He inherited a sound and old business. Three years in a row drought had cut severely into his customers' purchasing power, and being a proud man he did not want to admit that *he* was going to be the one to oversee the liquidation of the family empire.

When his figures were examined more closely it was found that his Net Worth had declined to $30,000 and his debt was up. His withdrawals were $15,000 for each of the last three poor years and no attempt was made to cut expenses, nor was any attempt *going* to be made to cut them. "I don't know how I can get by on less," he said. Yet 22c out of every dollar of sales went for owner's compensation.

Another man did find a way out—a difficult way:

> "Within a very short period of time after I started the business, I found I was taking more out than I was taking in. I had to make a choice of either sinking slowly or finding some way of getting by with less money. My choice, though obvious, was a difficult one to make. It was to work a double shift, 16 hours daily, and upon occasion, work outside the business in order to operate for the second year without taking any money out."

So much for the danger spots that are with the businessman each time he buys something, on each sale he makes on credit, and on each dollar he withdraws from the business.

Pitfall 8. Unplanned Expansion

Some decisions are made less frequently. One is the question of expansion. Expansion can be from within—a steady, gradual growth in sales or profits while capital and experience grow. Expansion can also come with more rapid acquisition of new units. One store is going well. Why not get a second and do twice as well?

Business should grow but the growth by addition or acquisition must be carefully planned. Generally additional capital is needed, but more important the ability to manage people is required, as this retailer describes. His wording may be awkward, but we can see his problem:

> "Things ran very smoothly until I expanded, putting in a new store across town. Then I found that my managers could not seem to grasp my particular method of operation. I couldn't teach them. I had to be therefore in both stores at the same time in order to obtain the maximum business. I made a little from the store where I wasn't until my wife took sick and couldn't help out there. Then my latest manager offered to buy me out and I sold. Now I only have the new store and things are running smoothly again."

A successful haberdasher decided to add a men's clothing department. He put $5,000 in the department. Things didn't go too well. Finally he came to his principal shirt supplier. A wise adviser in the office of the supplier said, "Joe, you were a good haberdasher, and one of our best accounts. Now you are a poor clothing man, for you can't offer selections. You can't run that clothing department profitably on $5,000. Why not close it out and put the $5,000 working for you again? You can make more out of that $5,000 in your old line than you ever will from the new." The man closed out the clothing department, paid up his bills and got on a discount basis. Then he put in a more varied line of haberdashery which in turn increased his sales.

Pitfall 9. Having the Wrong Attitudes

We have now seen the obstacles. Do you notice also a spirit of courage and determination among these men and women we have been quoting? They can speak of their troubles, but because of good heart they can also overcome them.

A man's business is a precious thing—to him, to his family and to the community. One business man writes:

> "There are troubles, sure, but when you get down to it, I guess it's a problem of Attitude and Attention. When you look at your business the right way, you get along. If you don't have the Attitude, don't start on your own."

Plain Hard Work—The feeling that "I'm the boss now and I can take off any time I want" may be the undoing of a good concern. A public accountant was called in to straighten out the involved affairs of several service stations owned by two brothers. Finally, in exasperation the accountant said, "You two boys go fishing so much you aren't around here often enough for me to find out where the trouble is."

Here is a report from a rough-hewn contract hauler from Colorado who learned to work. His definition of laziness is somewhat unique. He thinks a man can work hard and still *be lazy if he doesn't exert a little more effort than the job actually requires. Regarding his own personal history, Bill related this little story:*

> "I was employed as a laborer on a construction gang one time, back in the mid-30's, pushing a wheelbarrow. I noticed that one of the other men, also a wheelbarrow pusher, did everything on a dead run. Loaded or empty, his wheelbarrow was always going at top speed. Later on, I found out this man was used as a pace setter for the crew, and was paid extra. Ever since then, figuratively speaking, I have been pushing my wheelbarrow at top speed."

Outside Interests—Some business people get involved in all kinds of things outside their own business. The argument for going off at eleven o'clock for lunch and coming back at three is that, "I'm furthering my business interests." Certainly it is more fun to socialize and be a member of business and civic groups than work in the shop. It's fine if you can do it, and in some lines of business it's necessary. If these interests are not part of the operation, however, sound management raises the question, "How much time and energy can I take from my business and have it still remain healthy?"

These outside interests may extend to other extra-curricular and expensive activities. When a good business fails with no prior warning — the sudden-death kind of failure—the explanation for the demise sometimes runs like this: "He has been a fairly heavy gambler on the side. This time everything went wrong."

Responsibilities — There may have been a day when some believed the rule of successful management was to take all the traffic will bear and give back nothing. To follow this rule means avoidance of responsibilities. Misrepresentation of products to customers or "chiseling" on suppliers may bring temporary profit, but these do not lead to a sound and stable business.

Then come pitfalls that might be said to involve moral attitudes. One of the saddest things is to see an excellent business going along for years with good profits and then read that the owner was sent to jail for income tax evasion. It's a shame to see a fine enterprise ruined by greed.

WHAT CAN BE DONE ABOUT THESE PITFALLS?

To sum up, these are the pitfalls in starting and running your own business:

—Lack of experience
—Lack of capital
—Poor location

—Too much inventory, particularly of the wrong kind
—Excessive purchase of fixed assets
—Poor credit granting practice
—Personal expenses too high
—Unplanned expansion
—What might be called faulty attitudes

These are the problems. What can you do about them?

1. *Recognize Limitations.* Recognition of limitations is important to success. Every business has limitations of some kind—even the biggest manufacturers find themselves limited to certain areas or to certain products.

It isn't modest experience or modest capital that is the pitfall so much as trying to do more than the experience or capital will carry. A partner, in what is now a fine, strong concern says this about the early days of his business:

"We had little capital and no relationship established with a lending institution. Therefore, we turned down some orders which at the time were known to be profitable."

There were two things this young firm coul do. Take the orders; or turn down some business. There was early recognition of limitations. The young firm did what it was able to do and didn't get beyond its depth.

A highly-trained woman in the textile field with fine sales contacts decided to enter business on her own. She did converting and selling, and was not too successful. Learning her limitations she gave up the converting, and became a happy sales agent. "I couldn't do it all," she says.

When a limitation is recognized it can be reduced. A capital deficiency, for example, can be helped by the prudent use of credit, particularly if the borrower is careful to use the other person's money or merchandise with the same care that he uses his own. When you borrow money, you've got to do two things. You've got to pay for the cost of the money before *you* get a profit. You have to have things so arranged that income comes in regularly to meet the obligations as they come due. Lack of capital keeps people awake at night. But it also keeps them on their toes.

2. *Planning.* After knowing your limitations, PLAN. Don't just drift into things, but plan ahead. A professor at one of the universities says that in his classes on management he presses the idea that every business person should write out policy. You should write policy out on a piece of paper. You write, "My policy regarding mark-ups shall be as follows . . . My policy regarding the kind of customers I wish to draw shall be as follows . . ."

A man and his wife took over a restaurant and, without writing out policy, put in very nice fixtures, hired nice waitresses with dainty little aprons—a kind of tea room atmosphere. Then they found out that the potential customers are workers who take one look at the place and disappear. Perhaps if these restaurant people had written down, "I shall draw this trade; I shall give these menus to that kind of trade; I shall put these fixtures in for that kind of trade," they wouldn't have made such a blunder.

3. *Record Keeping.* Keep *enough* records, but don't keep too many of them. There's a jeweler who failed because he spent all his time in the back room keeping his books. You can't spend all your time record-keeping—you have to sell. On the other hand, you must know where you stand. When our reporters talk to business people about their early days it is surprising the number of men who say something like this: "If I were starting again, I would learn some bookkeeping or accounting. It's necessary to learn from figures what's going on."

4. *Watch the Balance Sheet — Not Just the Profits.* Keep an eye on the balance sheet, not on the profit and loss only. Business people are very aware of their sales, the gross profit, the expenses, and the net profit. But study of the balance sheet, particularly scrutiny of the liabilities, prevents mishaps. Liabilities are rock-like. When you owe a dollar, you owe a dollar. The assets go up and down with changes in prices, styles and demands. The merchandise may decline in value, but the $20,000 owing on it stays put.

Examine your liabilities one year, then look at them the next year and ask, "Am I going too far into debt? How do I stand debt-wise, compared with what I've got in the business?" Look at the trend in working capital. Is it up or down? Compare net worth. Decide not only did you make more money than last year but also whether you are sounder this year than last.

5. *Investigate. Investigate first, not after.* The incentive to make money is strong enough that all of us have the tendency to go ahead and act first, then look afterwards. It's possible to do a little investigation in advance. When a salesman comes along with an unusual bargain you can say, "Well, look, give me a day to think it over." When you check around you may find out that everybody else is offered this same "unusual" bargain.

6. *Suppliers and Banks.* One man said, "The best thing that ever happened to me is hooking up with a good supplier." It is the policy of many manufacturers and wholesalers to help in every way they can the people they call "our accounts."

Businesses that started off small have found that a good banking connection has helped along the road. The banker sees many enterprises come and go. A line of credit used judiciously is a very helpful thing.

7. *Learning.* Next, *learn as much as you can.* That way you reduce your limitations. Business clinics help. Meetings with people in your line are helpful.

Let us add a word about *courses.* In business, a course should pay off. If it doesn't, then take one in Greek or square dancing or take it in anything that will give you fun. But don't take it in business just for the sake of taking a course. Search out for the things you want. Then find the course that will give you what you want. A lot of people just take courses. But they shouldn't expect to overcome their limitations by signing up for Executive Management when what they need first is Bookkeeping!

8. *Professional Assistance.* Seek professional help and you can overcome limitations. Go to an accountant. He has a chance to view other businesses. If you plan to expand, ask, "Do you think I have the capital to go into this new plant?" or, "Would you set this thing up for me to show me how this deal will look if I went through with it? What additional risks am I taking on?" It is worth money to find where truth lies.

Plan; keep records and look at them, especially the balance sheet; investigate; overcome limitations by studying; get professionals and suppliers to help you, and guard your health. Above all, fit the operation to your ability, recognizing whatever limitations exist.

Then little by little you increase your ability and your capital, and you remove the limitations. You can go ahead solidly and surely, all the time keeping your business operation in the area of foreseen and calculated risks.

You can't avoid all pitfalls, but by knowing them and looking ahead you can minimize them. ■

Simulation: Versatile Aid To Decision-Making

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Two rather recent developments, (a) the advent of the electronic computer and (b) the evolution of powerful analytical techniques variously labeled as Operations Research or Systems Engineering, have combined to form a rather flexible set of tools for the industrial analyst.

Experimentation in a production context, as opposed to controlled laboratory conditions, has always been a problem. Disruption of existing processes can rarely be tolerated for the length of time usually required to yield valid experimental results. In addition, the cost of an experimental systems change can be quite high with no guarantee, of course, that the change will be beneficial; this risk increases the reluctance to experiment. As a result of these barriers, many systems alternates which could be superior to present procedures go untried and eventually forgotten.

Fortunately, one O.R. technique, known by the rather provocative title "Monte Carlo", offers real help in the situation just described. The point of view taken is simply an attempt to characterize the real system under study by means of a descriptive model of that system which can be manipulated and with which various alternates can be tested by simulation without touching the real counterpart of the model. The cost savings and versatility of this technique (not to mention the saving in anguish on the part of the plant manager) added to its conceptual simplicity serve to make simulation an important aid in the analysis of industrial problems. A prudent note should be injected at this point: simulation does not offer the speed and elegance of a strictly analytical solution. The price paid for the Monte Carlo approach is comparative slowness and approximation of solution. When the system studied, however, is very complex from an analytical viewpoint and defies ready mathematical formulation, simulation may not only be the best but perhaps the sole method of attack. The assistance of the electronic computer has further served to reduce the tedium and slowness of calculation.

At Lukens Steel Company, simulation has already proved helpful in the following problem areas:

1. Testing in advance the effect of varying slab weights on the incidence or rejecting plates for being too narrow or short to meet customer specifications.
2. Testing the effect of reduced repair cycles and extended service lives (in the rebuild of Open Hearth furnaces) on furnace availability and "bunching" of repair times.
3. Setting capacity standards on a man-machine work cycle characterized by both man and machine waiting times.
4. Testing the effects of alternative crew sizes in a variable demand environment on expected production, delays and backlog build-up.

Other industrial applications cited in the literature range from a full-scale model of an aircraft maintenance department (Ref. 1) to a study of the proper number of unloading docks for a major department store (Ref. 2).

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Characteristics of Simulation Problems

Most simulation studies arise from the analysis of an environment in which many variables are interacting on some output of the system. In addition, at

least some of these variables are "stochastic" in nature, i.e., involve a probability distribution rather than being constant through time. For example, new orders placed are rarely constant from week to week, machines do break down from time to time, and workers are absent on occasion. One then must realistically work with some probability distribution of demand, machine or worker availability. Further, when successive manufacturing stages are rather closely keyed to some average input, waiting lines and congestion can easily develop and reduce the efficiency of the total system. It is no surprise, then, that production processes which are characterized by operations in series represent fertile fields for the application of simulation procedures; in these instances the analyst is not only interested in some average value but frequently in sequences as well.

THIS type of situation is quite prevalent in the steel industry. Open Hearth furnaces may require, on the average, 13 hours to complete their cycle. However, there is dispersion about this average. If auxiliary equipment, such as charging machines and pouring ladles, were installed to merely meet this average time, on some occasions this equipment would be swamped by more than one furnace completing its cycle at the same time, while at other times this equipment would lie idle. Coupling the Open Hearth furnaces with soaking pits, transportation net-works and rolling mills (each subject to its own variability in cycle time and delays of various types) renders the task of ascertaining the effect of a change in one link on the other links of the production chain a difficult task at best. In expanding one phase of the system, e.g., Open Hearth capacity, one must consider the repercussions on other closely connected parts. Similarly, scheduling of material through a system such as this can take appreciably different times depending upon the particular sequence chosen. It is in complex processes such as these that simulation offers a practical experimental tool to test "on paper" as it were, the effect on the total system due to some change in a part of that system. The closer, of course, that the model can be made to reflect its physical counterpart the more reliable will be the results derived from the simulation.

A typical simulation might involve the following steps:

1. Some measure of effectiveness of the system, e.g., total delay time, output or profit is chosen as the pertinent variable to optimize.
2. A flow-chart of the process under study is laid out and the variables acting upon the measure of effectiveness are isolated. Inasmuch as the final validity of the model depends upon this step, it cannot be overemphasized that the expert judgment of operating personnel must be brought to bear on the selection of these variables.
3. Data are assembled on the variables of Step 2 and probability distributions are constructed.
4. The environment represented by Step 3 is manipulated through the employment of some randomizing device which "manufactures" a typical sequence of events which are subjected to the change under study.
5. After a large number of such repetitions are performed the effect of the change on the environment is summarized.
6. The results of the change are related to the measure of effectiveness.
7. Additional systems alternates can be brought in and evaluated (either individually or in combination) by the same procedure.

A Case Study

To demonstrate how a simulation approach can be used in an industrial context, the following case study is presented. Certain details have been left out to avoid obscuring the broad outlines of the procedures; some corporate data have been disguised for obvious reasons. It is felt, however, that the steps in conducting a simulation study can be illustrated meaningfully by their application to the problem discussed.

Even at the risk of over-formalizing, the problem should be stated specifically. In the illustration used here, the purpose was to study the effects of varying service life and/or repair time on (a) the availability of Open Hearth furnace capacity and (b) "bunching" of furnaces for repairs. In order to designate specifically just what is involved, several considerations can be set forth.

1. Each of our twelve Open Hearth furnaces must be shut off from time to time for rebuilding. This is simply one of the facts of life for the steel maker. After some number of days of operation, say one hundred, the refractory lining has deteriorated to the point where it must be replaced. Thus, every one hundred days or so, the producer must expect each Open Hearth furnace to go down for repairs. The number of days the furnace operates between rebuilds we shall call furnace life.
2. Completion of the rebuilding process on the furnace requires some number of days. During this time, obviously, the furnace is unavailable for production. Like service life, rebuild time is not constant for all furnaces or for the same furnace at different times, but is subject to some variation around an average, say, of eleven days.
3. Each day a furnace is down for rebuild represents a cost in lost production and the longer a furnace is down, the greater the production loss.
4. When two or more furnaces go down for rebuild at or near the same time, the situation is designated as "bunching". In this case demolition work in one furnace must wait until the demolition crew finishes with the other, so that the effect is to lengthen repair time on the furnace(s) that must wait, thereby causing additional lost production.
5. The breadth of alternatives open to management in dealing with the furnace rebuild problem can be described by its limits. At one extreme would be a policy of waiting until a furnace almost collapses before rebuilding is begun. At the other would be a schedule of rebuilding operations with such a short interval between rebuilds that practically no unscheduled rebuilds would occur.
6. By rebuilding only when furnaces are near collapse, the minimum number of rebuilds could be achieved. However, the bunching would be entirely uncontrolled; to the extent bunching occurred, furnace repair time would be increased and availability reduced.
7. By tight scheduling of rebuilds, most bunching can be avoided, but only at the cost of some lost productive furnace life.
8. Should rebuild time be reduced, with no change in furnace life one could expect a somewhat greater number of cycles of rebuild-service-rebuild over a given time in-

terval simply because of the shortened cycle. Intuition suggests the twin possibilities of (a) somewhat greater availability, since a greater proportion of each cycle is in furnace life, as opposed to rebuild time and (b) somewhat less bunching, since there are fewer days on which the conflicts could occur. These intuitive insights need to be checked out. This the simulation procedure is designed to do.

For the presentation of the remainder of the study, the conceptual structure of the steps in a simulation presented above will be followed.

Step 1—Measure of Effectiveness

Whether a measure of effectiveness is appropriate in a given situation depends on several considerations.

The basic factor, of course, is validity: the degree to which the particular measure really does reflect the level of effectiveness of the operation. A second factor is sensitivity: the ability of the measure to respond to changes (since the rationale of simulation involves testing various alternatives). A third factor is understanding: the degree to which Research and Operating personnel share common understanding of the meaning of the measure.

In this case a statistic called furnace availability was chosen as the measure of effectiveness. In a time of capacity operation, the number of available furnaces is obviously a rather direct indication of how close we are coming to the desired state: maximum production.[1]

Step 2—Identification of Variables

In this case, the identification of variables acting directly upon the furnace availability criterion was quite simple. Obviously, availability is closely related to the proportion of time a furnace is in actual production in a given interval. The only direct influences on this proportion are (a) number of days the furnace is operating (sum of furnace life intervals) and (b) number of days the furnace is not operating (sum of rebuild time intervals). This identification of variables is somewhat oversimplified, in that we have not isolated the factors that cause the variation in furnace life or in rebuild time. However, this is not a handicap in the simulation since only description, in statistical terms, of the variation in these phenomena is needed. Causative factors do not have to be identified for the objectives in mind.

Step 3—Data Collection and Summarization

From the appropriate Operating personnel, data covering the historical performance of each of the furnaces were obtained. Dates when each furnace went down for rebuild and dates when each was put back in service were noted for the past several years. From this information it was possible to determine corresponding furnace-life and rebuild-time intervals. These data, it was found, fell into probability-type distributions similar to the hypothetical ones shown herein. Figure 1 contains histograms illustrating percentage frequencies of various furnace-life intervals and various rebuild-time intervals. It can be seen that the most common furnace life is found in the interval from 90 to 110 days. For rebuild time, the most common situation is seen to be from 11 to 13 days. Also to be noted is the variation of both these measures about the central point, and this is why they are treated as probability distributions. In other words, based on past performance, a given furnace life is most likely to be in the interval from 90 to 110 days, while there are also somewhat lesser probabilities of its being, says, from 70 to 90 days, or from 170 to 189 days. Similar inferences can be drawn from the histogram of rebuild times.

In Figure 2, the data are arranged in cumulative probability fashion; the dotted lines represent a cumulated proportion of occurrences at or below the upper limit of each interval. Thus, we can see from the chart for rebuild times that .72 of the rebuild times were 13 days or less. On the chart for furnace life, one can see that about .55 of the furnace life times were 110 days or less. The curves superimposed on the histograms are cumulative probability curves, whose specific use in this study will be discussed later.

Step 4—Manipulation of Environment

One of the powerful arguments for the simulation approach is its ability to generate "experience" without actually interrupting production. In order to test whether this generated experience is a reasonably accurate representation of actual behavior of the system, two preliminary steps are needed. The first is to check to see if furnace life and rebuild time are independent variables. Were this not the case, the simple randomizing techniques used in this study would not be appropriate. In the present study, inspection of the scattergram of furnace life vs. rebuild time was sufficient to show lack of correlation between the two. In doubtful cases, covariance can be computed if desired to check this point.

A second preliminary step is to try out the descriptive model by the randomizing technique to see if behavior like that in the historical period can be obtained. If both these preliminary checks are satisfactory, one may with reasonable assurance proceed to study the experience generated under alternative conditions.

THE actual generation of experience can proceed as described below. Using an enlarged chart of the type shown in Figure 2 and a series of two-digit random numbers, one can, by reading off the furnace life corresponding to each randomly-selected point on the cumulative probability scale, develop a series of furnace life intervals. Similarly, by using the corresponding rebuild-time chart and another series of two-digit random numbers, as long a list of rebuild times as may be desired can be produced.

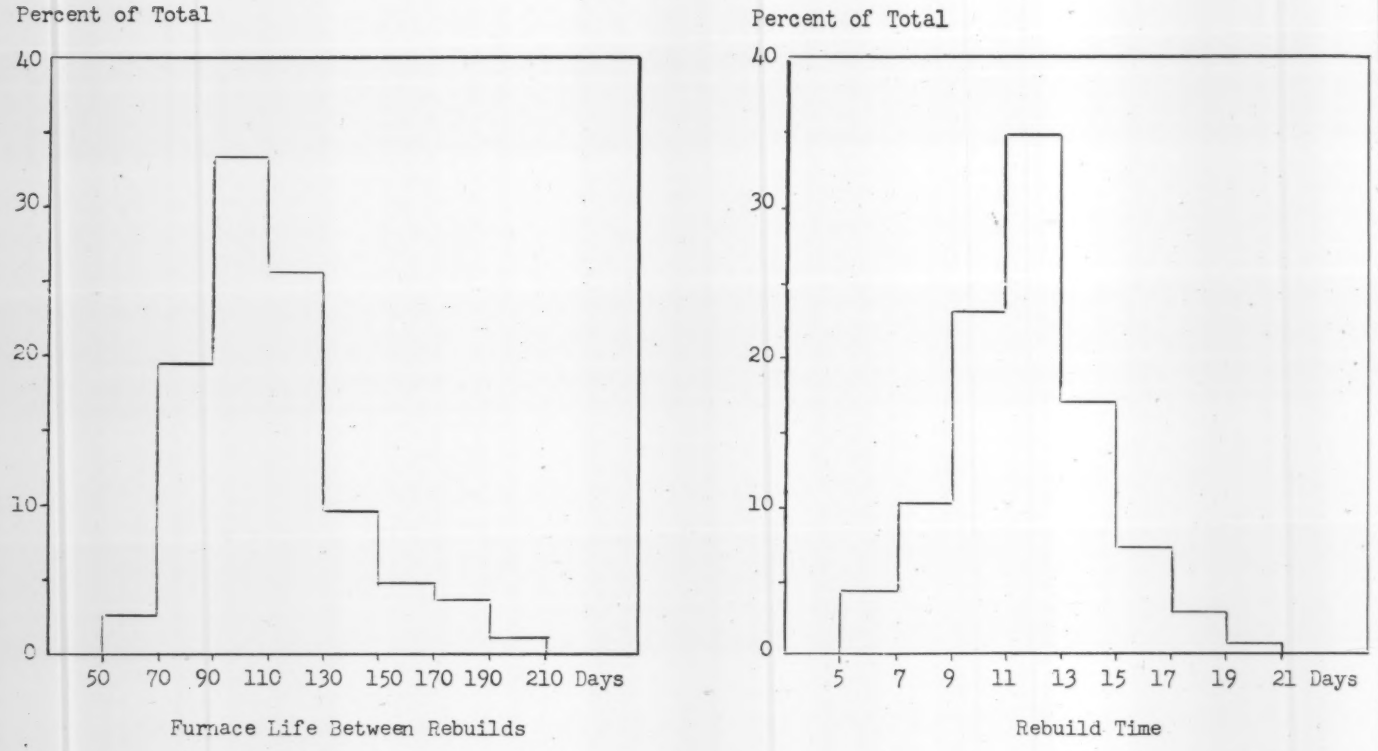
When the lists of furnace lives and rebuild times have been developed in this way, it is a simple matter to adjust these figures to reflect any changes in the situation one might wish to study.

Table I illustrates the procedures just discussed, for a hypothetical five-furnace shop. A series of five two-digit random numbers has been chosen for each furnace for each of the two variables: furnace life and rebuild time. For Furnace 1, for example, the first random number for service life is 51. We refer to the cumulative probability chart for furnace life in Figure 2, and find that at the .51 probability level, the corresponding furnace life is 109 days. (In practice, one needs a much larger chart than this to read off with one-day accuracy, and such a graph actually was used in deriving the furnace lives and rebuild times in Table I.) Similarly, for Furnace 3 the first random number for rebuild time is 86. Going to the .86 level

[1] *As the reader will note, the use of furnace availability is an over-simplification, (used to facilitate the exposition). Actually, one would balance the incremental cost necessary to achieve availability (overtime, shift differential, etc.) against the incremental gain of profit produced on the additional tonnage achieved by the availability gain. As such, the typical "lowest* total *costs" would constitute the measure of effectiveness.*

FIG. 1.

FREQUENCY HISTOGRAMS - FURNACE LIFE AND REBUILD TIME



on the rebuild time chart, we find the corresponding number of days for rebuild to be 15. The furnace lives and rebuild times thus obtained constitute "experience" under the old situation. In the lower part of Table 2 is illustrated the procedure for setting up experience under an alternative course of action: the illustration is that of reducing rebuild time by two days. To deal with this alternate, no change needs to be made in furnace life figures: each rebuild time is reduced by two days. Other alternates one might wish to set up could be: reductions of one, three, four, etc., days

FIG. 2.

CUMULATIVE PROBABILITY DISTRIBUTIONS - FURNACE LIFE AND REBUILD TIME

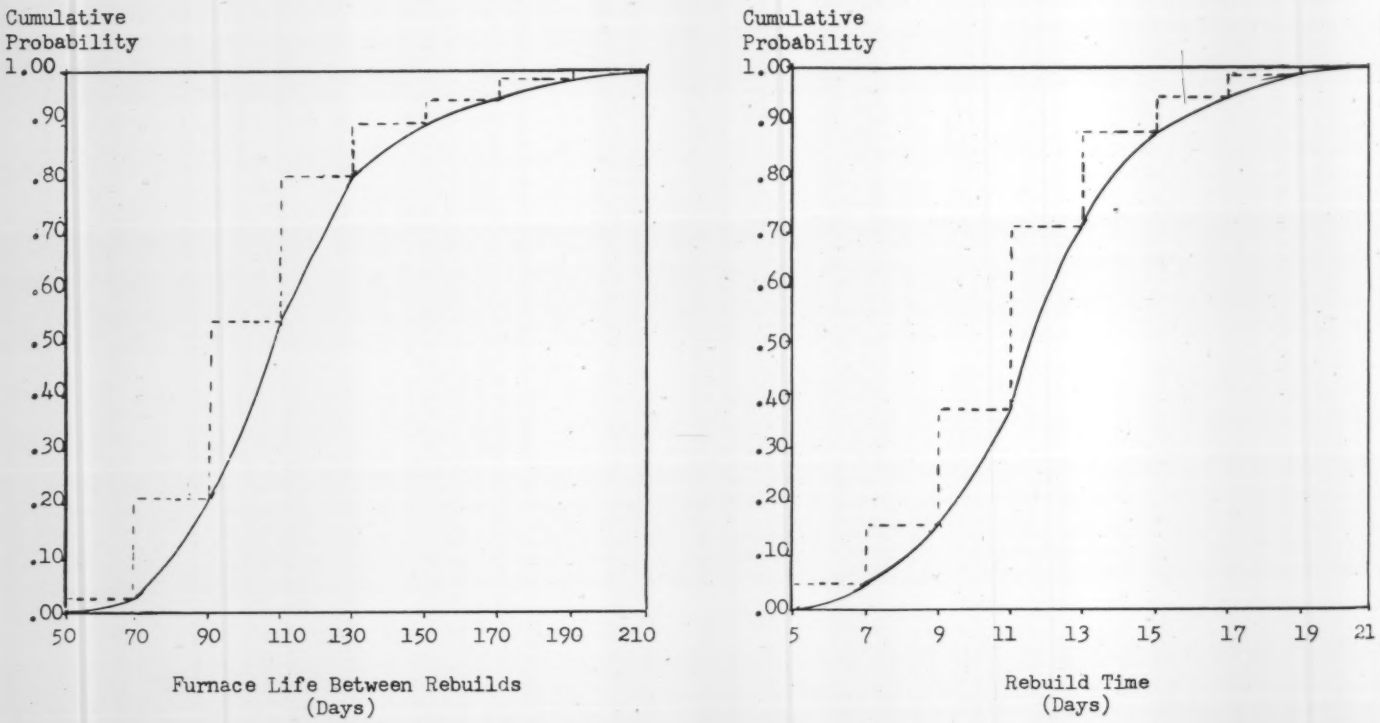


Figure 3

SAMPLE SEQUENCE OF FURNACE REBUILD BEHAVIOR
(Source - Table 1)

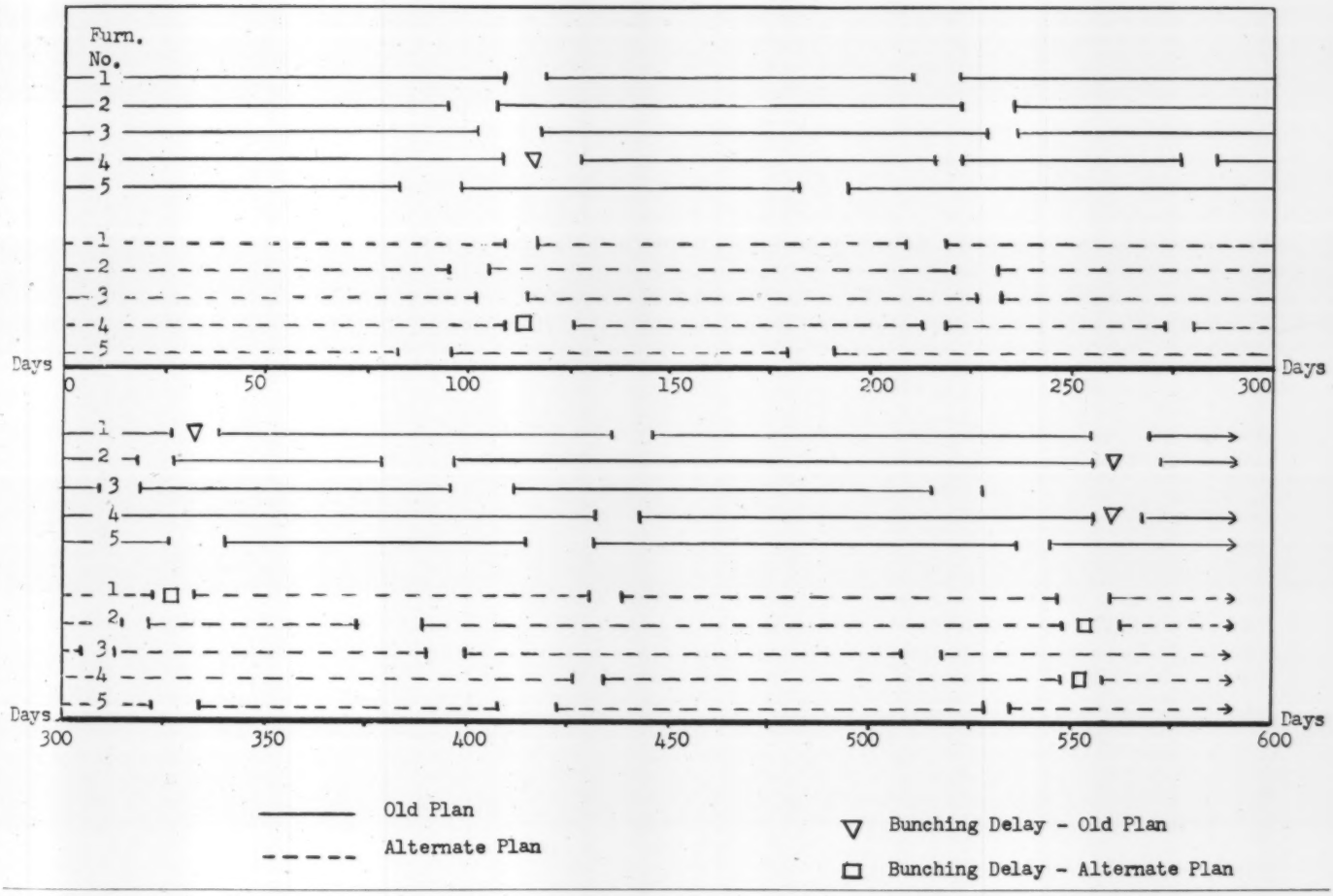
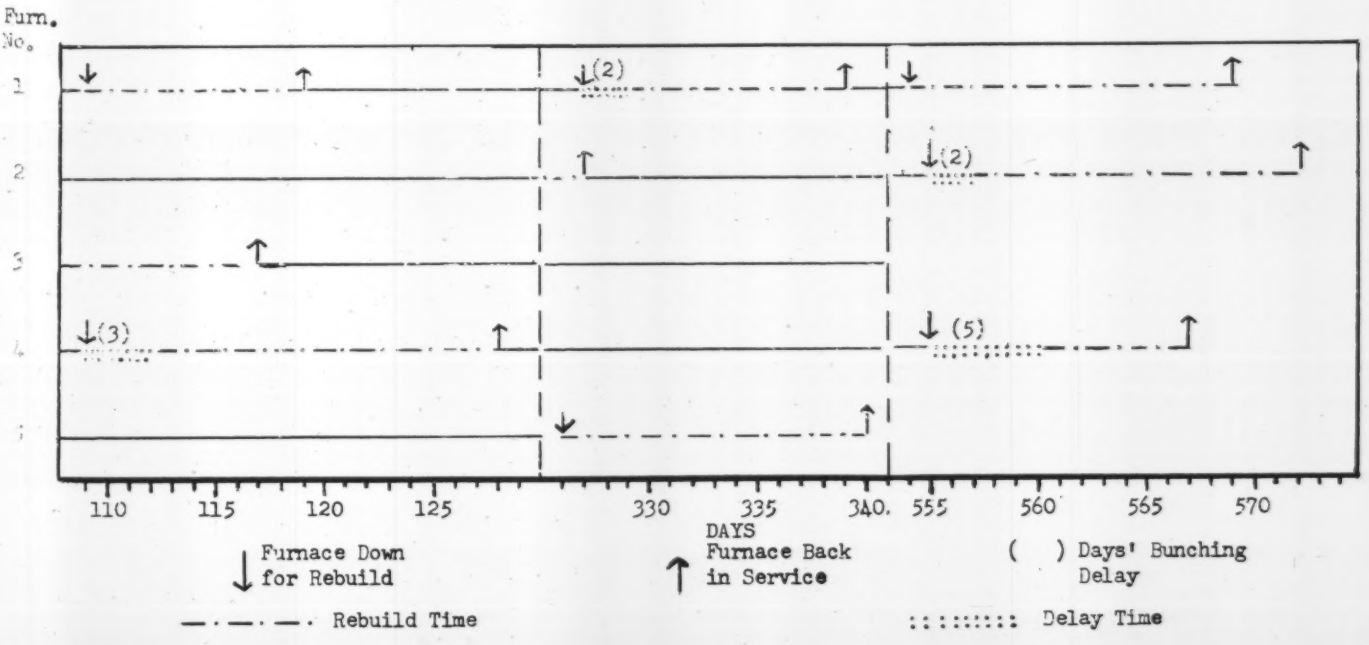


Figure 4

DETAIL OF BUNCHING DELAYS UNDER OLD PLAN



in rebuild time; extensions of service life by some specified number of days, perhaps 5% or 10% of the present average; or combinations of shortened rebuild time and extended furnace life. These alternates. either separately or in combination, could be handled analogously.

Step 5—Summary of Effect of Changes

Figure 3 presents in graphic form the simulated furnace history presented in Table 1, both for the original situation and the alternate, where rebuild time was reduced by two days. An intermediate table, not included here, was drawn up to establish the points in time when each furnace (a) came down for rebuild and (b) was put back in service. As these down times were calculated, they were checked against all preceding down times to locate any bunching. Delays beyond the designated repair times were included when bunching occurred as follows:

Furnaces down	*Delay*
Same day	3 days
1 day apart	2 days
2 days apart	1 day
3 or more days apart	0 days

For the relatively short time span covered by the data of Table 1 and Figure 3, bunching occurs in exactly the same way under both original and alternate plans. Thus, under each, Furnaces 1 and 4 bunch at the end of their first service intervals: Furnace 5 comes down for the third time just one day ahead of Furnace 1; at the end of the fifth cycle Furnaces 2 and 4 come down on the same day, which happens to be just one day after Furnace 1 comes down. As the simulation is extended, furnace cycles tend to overlap, so that, say, the nineteenth cycle of Furnace 3 may coincide with the eighteenth cycle of Furnace 2.

More important than the matching or non-matching of cycles is the increased down time incurred when two or more furnaces bunch. Since, in our example, the bunching patterns were identical under original and alternate plans, only the instances of bunching taking place under the original plan are shown graphically in Figure 4. The patterns for the alternative plan would differ only in their location on the time axis.

Step 6—Relating Changes to Measure of Effectiveness

A summarization of Figure 3 (using the 500th day as a cut-off point) would indicate that, under the original plan, furnace availability would amount to the equivalent of 4.50 furnaces. Under the alternate plan this availability increases to 4.58 furnaces. This added availability achieved by reduced rebuild time is in accord with what would be expected. In practice a much longer period of time would be chosen in order to both ascertain the true effect of bunching of furnace arrivals and to reduce sampling error.

Table 1

Simulated Furnace History

Furnace 1		Furnace 2		Furnace 3		Furnace 4		Furnace 5	
R.N.	Service Life	R.N.	Service Life	R.N.	Service Life	R.N.	Service Life	R.N.	Service Life
51	109	27	95	39	102	51	109	13	83
21	91	62	115	55	111	17	87	13	83
44	105	14	83	04	73	01	55	81	132
35	97	00	52	08	77	88	146	05	74
50	108	13	158	43	104	57	112	44	105

R.N.	Rebuild Days		R.N.	Rebuild Days		R.N.	Rebuild Days		R.N.	Rebuild Days		R.N.	Rebuild Days	
	Old	Alt.		Old	Alt.		Old	Alt.		Old	Alt.		Old	Alt.
26	10	8	56	12	10	86	15	13	91	16	14	88	15	13
59	12	10	71	13	11	09	8	6	04	7	5	74	13	11
28	10	8	15	9	7	25	10	8	16	9	7	81	14	12
23	10	8	97	18	16	89	15	13	37	11	9	95	17	15
87	15	13	89	15	13	54	12	10	05	7	5	07	8	6

* Random Number

Note: Service Lives and Rebuild Days were read from an enlarged replica of Figure 2.

Summary

Simulation is obviously no ready-made answer to all decision-making problems. Its disadvantages are:

1. Approximations to the true relationships of the variables are produced; however, this sampling error is reduced (although not proportionally) as a greater number of repetitions are carried out.
2. Unless computers are available, the procedure is tedious and time-consuming.

Matched against these disadvantages, however, are decided advantages of:

1. Versatility in handling a large number of problems involving probabilistic elements.
2. Conceptual ease of formulation.
3. Easy communication of the research results to the potential user of the results.

The day appears to be approaching when models of an entire production process or business enterprise will be developed to test proposed systems changes and gain understanding of the enterprise itself.

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What Is Human Relations?

By Alan C. Filley

Assistant Professor of Management
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Grand Forks, N.D.

DR. BROCK CHISHOLM, at Indiana University, recently stated that the United States has become a leader in mechanization, in creating machines to do the work of many men, but has delayed in understanding the individual as a human being. Paying only lip service to human relations, as so many do with religion, motherhood and love, has become an accepted thing among us.

Business leaders are no exception. The lower levels of the management hierarchy are delegated the responsibility of making sure that the worker is "motivated," that his human dignity is respected. New titles of "counselor" and "V.P. of H.R." are given often merely because of the idea that such a thing is good publicity, indicating a progressive company rather than from any real desire to understand the problems of the worker.

Human relations in business has suffered the same problems that befell personnel administration in its early stages of business acceptance and has, in most cases, been understood to mean the same thing as personnel administration or, carried even further into obscurity, to mean a sort of *super*-personnel administration.

The approach to sound human relations application in the business organization would seem to be two-fold: First, there must be a clear definition of the function of human relations and of its place in the business environment; and secondly, the principles of sound human relations procedure must be understood and applied by all members at *all* levels in the business organization. Perhaps there has been too much impatience on the part of managers to give lip service, if not actual application, to the second point without the logical understanding of the first.

For this reason, this paper emphasizes *organization* for a human relations program rather than the principles of application of human relations, so the cart may be moved to its rightful place *behind* rather than *before* the horse. The objectives are: 1) To show the source of the human relations function in the business. 2) To show the place of "motivation" in the management function. 3) To show the relationship of personnel administration to human relations. 4) To indicate future trends of human relations in business.

Professor Filley organized a Personnel Management Curriculum at the University of North Dakota, which includes a course in Human Relations in business that is a required course for all business management majors. He joined the Dakota university in 1956 after receiving an MBA from Indiana University. He received a B.S. in 1953 from Millikin University. From 1951 to 1953 he was employed by the Music Box Corporation in the Sales Management and Sales department.

The Confusion Between Human Relations and Personnel Administration

The distinction between motivation, human relations and personnel administration has been a sore spot with the students of such fields of study. Basic writings in personnel speak of something that is "practiced by everyone in the organization" yet are filled with policy and procedures for employment, training and the rest of the basic personnel functions. One might assume, then, that these authors advocate training *all* managers in the business in the procedures of personnel administration. For example, that all managers should be trained in employment techniques: in finding sources of possible job applicants, in gathering information about the applicant, in induction of the employee into the job or in acquainting the employee with the medical, financial and non-financial services available to him.

However, a further examination of the intent of these authors will show that what should be practiced by every-

one in the organization is not personnel administration; instead, it is human relations.

The personnel function evolves quite logically from the line functions of the business as the organization increases in scope and complexity. It is not master-minded from the top with little relationship to the needs of the rest of the business, as was the case when many formal personnel staffs were hastily organized during and after World War II. At that time, personnel administration (as is now done with human relations) was *the* thing to which any modern business subscribed, needed or not. And in most cases the intent of that recognition of personnel was based on a human relations rather than on a personnel need, for most businesses had someone carrying on the functions of personnel whether the staff was labeled personnel or not.

LET us endeavor to find the root of our confusion by tracing the logical growth of the personnel staff in a growing company. At first, when the company was small, the employment, training and other personnel functions were easily carried out by the line manager. As the company grew, the line manager delegated the responsibility for the personnel functions to one of his men—the beginnings of a personnel staff. Next, as the business increased in scope and complexity, the formal staff was organized to aid the line in the special personnel capacity. Just as the finance function of the business was responsible for the finances of the business as they controlled the business organization, so the personnel staff became responsible for the *people* in the organization as they were related to the business. It is important to note that we are here concerned with the relationship of the person and the job, for we shall later examine another relationship, that of the person to other individuals in the organization.

Since the personnel staff dealt with personalities, it was quite natural that management should delegate to personnel the responsibility for recognizing and solving the myriad social problems that arose in the organization. To the personnel manager went the problem of dealing with the sentiments and morale factors concerning the employee and the job of giving the line management an insight into dealing with such problems. The personnel staff could try to place the right man, properly trained, into what seemed the right job, but it was the supervisor of the employee who felt the full brunt of the social problems within the area of his supervision. Thus, writings in the personnel field contained such statements as "The personnel manager is always endeavoring to work himself out of a job . . . he is continually influencing and training the line supervisors and executives to do a personnel job."[2]

A personnel job? No, it's a *human relations job*. In spite of the development of the customary tools of personnel administration, there remained the need for aiding individuals in the organization in the problems arising out of their relations with others in the business environment As the organization grew, the personnel staff could handle the technical requirements of setting job standards, hiring, training and facilitating the work of the new employee. But what was to be done with the undefinable, intangible *social problems* that arose?

These social problems occurred in the relationships of the worker to his supervisor, his fellow workers and those under his control. Likewise, they occurred in the relationship of the workers' group and the management group. The worker brought to the job a certain set of wants and needs determined by his home, social and community situation. No staff could deal with these problems as they were reflected in the job. Rather, it became the supervisors' function to deal with these non-logical human problems.

The Functions of Personnel and Human Relations

In order to understand the functions of human relations it is essential that we see the distinction between these functions and those of personnel administration. The functions of personnel administration are concerned with the relationship of the individual to his job while human relations is concerned with the relationship of the individual to other individuals in the organization. And what function of the business is likely to be in contact with a greater proportion of the individuals in the varied operations of the business? The personnel staff, of course. This staff, which is concerned with the relationship of the individual to his job, is of necessity the seat and the example of sound human relations procedures.

[2] *Paul Pigors and Charles A. Myers*, Readings in Personnel Administration (*New York: McGraw-Hill Book Co.*, 1952), *p.* 91.

Let us examine the functions of personnel administration in greater detail:

1. *Research and Standards*—It is the job of the research and standards function to collect, analyze and interpret information through job analysis and job evaluation for the purpose of setting equitable wages and salaries in the organization. It is concerned with establishing the requirements of the job.

2. *Employment*—The requirements of the job having been determined, the employment function provides the right man to fill the job. Through proper selection, placement and promotion, this function endeavors to find the right man to fit the properly organized job rather than hastily changing the job to fit the man.

3. *Training*—This function is concerned with giving employees information and skills in order that maximum productivity may be achieved, that effectiveness in their present jobs may be improved and that employees may be prepared for further advancement in the organization.

4. *Health and Safety*—With careful selection and training of employees it is natural that their effectiveness on the job should not be impaired due to unsafe practices or due to poor health. This function is concerned with protecting and maintaining the health and safety of each employee for the mutual benefit of the employer, employee and fellow workers.

5. *Employee Services*—Since the employee wants or needs other benefits in the job situation besides mere pay, the employee services function of personnel provides and maintains the recreational facilities, the cafeteria, the insurance programs, the retirement program and other financial and non-financial benefits.

NOTICE that the personal functions enumerated above call for specialized skills on the part of the personnel staff. Such skills would not pervade the management of the organization any more than would the shop foreman be expected to be highly skilled in accounting techniques.

The skill that *does* pervade the entire organization is that of dealing with the relationship of one individual with another or of the relationship of one group of individuals with another group. These, then, are the activities of the human relations function of the business:

1. *Management development*—Often

top management expects supervisors to practice a considerate approach to employee problems while failing to practice sound human relationships themselves. For example, foremen fresh from a course in human relations become aware that the techniques which management expects them to use in dealing with the workers are the very things in which management itself often fails. Management attitudes must often be changed in order to prevent their merely acting a role of human understanding to which they themselves do not subscribe. Such role playing on the part of management promotes inconsistency of behavior—a prime factor in causing employee adjustment problems.

2. *Employee relations*—This function endeavors to provide the employee with the proper information in order to promote motivation, job-satisfaction and cooperation with fellow employees. While the promotion of sound employee relations is the concern of all levels of management, it is of particular importance at those levels which are likely to come into contact with employees at the operative level.

THE employee relations function should take a positive approach to the morale problems of the employees. Through its attitude surveys in the organization, the employee relations people should be able to determine possible future problems in employee behavior which may be averted through the use of sound judgment and planning.

Still more effective in determining the individual wants and needs of the employees is the use of a sound program of employee counseling. Such counseling helps the workers with personal problems that are outside the work situation as well as helping employees to adjust to the work situation. Too often the difficulties of the employee in his external environment are reflected on the job. Such counseling also provides an excellent means of both upward and downward communication. Management policy and practice may be explained to the employees and employee attitudes may be sampled and communicated to top management. Since employee confidence in the counseling service is essential, it should be removed from the area of management control in order that the worker will not feel that his frank statements to the counselor will reflect on his job.

3. *Labor relations*—This function is concerned with developing a labor contract that expresses the wishes of both labor and management and endeavors to promote sound labor-management relations. Collective bargaining and grievance procedure are important parts of labor relations and require sound application of human relations procedures. The union organization provides a useful channel of communication. It is important that the information which the union obtains is accurate and that it is accepted and distributed by the union with a feeling of genuine confidence and cooperation. It is also important that management get accurate descriptions of employee wants and needs from the union. If such two-way communication is maintained, many of the programs of dissemination of information are best worked out through the union organization.

4. *Public or community relations*—This function realizes that the employee brings to the job attitudes that have already been shaped by the environment in which he lives. An understanding of the individual's actions on the job may be derived through understanding the community in which he lives. Since an accurate picture of the business by the community is essential for community relations, the public relations program must be one of positive community action; i.e., the program must keep the community accurately informed of the actions of the business and of any changes that are likely to take place which will affect the community.

Examples of Human Relations Problems

Perhaps the distinction between personnel and human relations may be more easily understood by stating several examples.

Example 1. Worker "A" has been properly screened, inducted and placed on a job in the inspection center of an appliance manufacturer. Job descriptions indicate that Worker "A" is fully capable of doing the work and adequate job instructions have been given. Several months after induction on the job, Worker "A" applies for a transfer to another department, stating that he is dissatisfied with his present job and would be more satisfied with the new position.

The personnel functions of employment and placement have been performed adequately and the activities of transferring the worker would seem to solve the worker's problem. The human relations factor would enter if it should be found that the reason for wanting a transfer is not because the worker feels better qualified to do the new job but, instead, because the worker has not been accepted in the informal society of his present associates. Perhaps the fellow-workers feel that Worker "A" is being primed to take one of their own jobs or that, since he was not introduced by the foreman to the fellow-workers, he is a spy from top management sent to report on their efficiency.

Example 2. Mrs. Smith has been doing a satisfactory job in the billing office of a service company for 20 years. Recently, her absenteeism has greatly increased and she is careless in the quality of her work. Her supervisor is afraid that because she is due to retire soon, she is looking forward to her retirement rather than sustaining any effort to do her present work well.

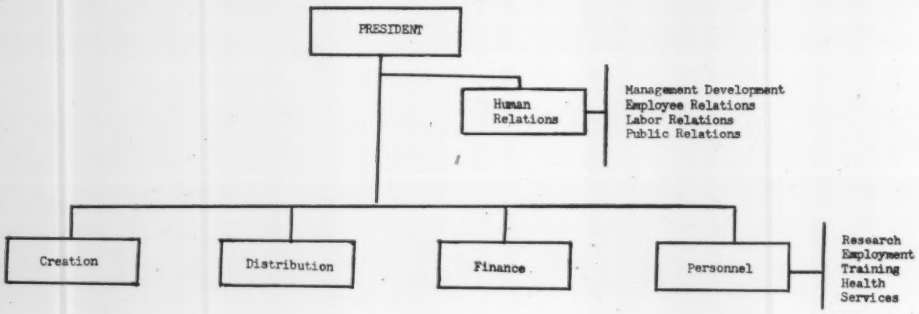
It could reasonably be assumed that the payments for pensions from the company were at such a comfortable level that they served as an incentive for the worker to reduce output shortly before retirement.

Human relations understanding may lead the supervisor to discuss the problem with Mrs. Smith and, instead of taking a hasty move to penalize her, may find that a groundless rumor that she is to be fired before her retirement age has caused Mrs. Smith to lose faith in the company for which she has worked for many years.

Such examples are, of course, rather obvious but they do occur frequently without even the simplest attempt being made to understand them.

AS FIGURE #1 shows, the personnel department is one of the four basic functions of the organization. Whether it is of a true staff nature is a matter for discussion. A great deal of time and effort has been expended in explaining or justifying why so much line authority has been delegated to the personnel department. It would seem to this author that when the distinction between personnel administration and human relations has been clearly defined, the position of the personnel department will be comparable to that of the finance function of the business.

The human relations staff is clearly a staff by definition. It exists to aid the line in dealing with the social problems



FUNCTIONAL ORGANIZATION CHART

Figure 1

of all employees, including management. Davis points out:

> *"The nature of the leadership function (i.e., the fact that human relations is a part of nearly everything the leader does) requires that most human relations responsibilities remain with him but a small proportion can be delegated to a staff. . . . If (the staff) can get managers to* practice *good human relations, its big job is done. The staff human relations group, therefore, works* through *managers rather than* for *them."*[3]

Several things must be emphasized. First, that human relations (dealing with human beings) is a function that must be practiced by everyone in the organization. The human relations staff will have failed should it either retain the sole authority for making decisions in this area, or should it fail to instill in everyone in the organization the best techniques for understanding and dealing with human problems as they arise.

Secondly, that of necessity the effective human relations staff must be a *small, fast moving* and *highly skilled* group. Because of the need for human relations in dealing with all personnel problems and because of the personnel department's contact with the employee group as a whole, the human relations staff will likely be placed within the personnel department. It is felt that as the worth of the human relations staff becomes more apparent, it will be separated from the personnel staff entirely, except for possible functional relationship. Until it is clearly separated from the personnel department the full value of its communicative wealth cannot be derived.

Thirdly, the human relations staff should have access to the chief executive. This proximity to top management is to insure that the information and human relations training which the staff distributes may permeate to *all levels of management* from the top down.

The Filter Function

The function of human relations in a business may be further clarified by explaining its relationship to the functions of management. The functions of management may be defined as planning, organizing, applying and controlling. These are all tangible and easily understood, but there is the intangible to cope with. The intangible, non-logical human problems with which management must deal include all of the evasive conditions which have been termed motivation, morale, personnel administration, etc.

Job satisfaction, expressed in the numerous intangible terms mentioned above, is maintained by passing information from one individual to another. The act of passing information from a sender to a receiver we call communication. The information that is transmitted may be facts or it may be an expression of the attitudes or sentiments of the sender. It is important that management receive both facts and sentiments from the lower levels of the organization and it is essential *that management is able to separate the two.*

This distinction is necessary in order that management may evaluate the expressions of attitudes and sentiments among the employees of the organization to determine the true problems to be acted upon. By the same token, as information is directed downward through the communicative channels of the organization, management must insure that accurate and true information is filtered throughout the business.

The function of human relations now becomes one of sifting facts that are communicated throughout the business from expressions of opinion. This management function, which insures that facts are not clouded by expressions of opinion, we shall call the "filter function."

Unless the filter function is included in the functions of planning, organizing, applying and controlling work activities, management will fail. As an organization grows, its channels of communication are lengthened and the division of the work processes becomes more complex. Without adequate operation of the filter function, workers lose pride in their work and in themselves and live constantly in fear of further changes in the organization which may affect their jobs. As functionalization in the business increases economical efficiency, the filter function *must* maintain human relations efficiency.

Quite often, particularly in those areas of the business which are not likely to contribute immediately to the net profit, new staff functions put forth a great deal of effort in proving their value to the organization. At such times the hue and cry of the staff executive is that he "must report directly to the chief executive." With the separation of the functions of human relations and personnel, it should be evident that the personnel staff performs an obvious saving service to the business and that only the human relations people need access to top management.

Through activities of personnel, the right worker may be placed in the right job. It then becomes the job of line managers to manage, aided by an understanding gained through the filter function and advice and service from the human relations staff. The wants and needs of the work force change during the course of time. Those needs relating to the individual and his job may be properly filtered through the management organization or the human relations staff, and put into action by the personnel staff. The assumption that people do not want to work is unfounded and when it does occur, it is a sign of failure of the filter function, not the worker himself.

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Fox Valley	100	Milwaukee	21
No. Mississippi	100	Long Island	20
Portland	100	Puerto Rico	20
Poughkeepsie	75	Providence	13
Alabama	50	Kansas City	13

[3] *Keith Davis,* Human Relations in Business *(New York, McGraw-Hill Book Co.,* 1957).

West German Specialists Visit National Office

A TEAM of nine West Germans holding high-ranking posts in the West German Ministries of the Interior, Defense, Labor and Finance, all of them either doctors or experts on hospital construction, recently visited the S.A.M national office. The visit was sponsored by the West German Government. The group included: Left to right, first row: Oberregierungstrat und oberregierungsmedizinalrat Dr. med. Kiessig, Ministry of the Interior of the Land Schleswig-Holstein; Mrs. Marie Gehrt Betriebswirtin, German Hospitals Association, Dusseldorf; Dipl. Ing. Walrat von und zur Mühlen, Architect, Frankfurt/Main; Stefen A. Tarnowski, International Service, Interpreter.

Second row, left to right are: Oberfeldarzt Dr. med. Friedrick Härting, Federal Ministry of Defense, Bonn; Regierungsbaudirektor Alfred Schwalke Federal Ministry of Finance, Bonn; Ministerial Dr. med Blohmke, Federal Ministry of Labor, Bonn.

Third row, left to right: Thomas J. Murphy, Johnson & Johnson Research Center; George M. Goettelman, S.A.M Vice President of Civic Affairs; Professor Dr. Benno Schachner of the Technical University of Aacken; Dipl. Ing. Herman-Wolf Meyer, Regierungsbaumeister a. D., Technical University of Berlin—Charlottenburg, Institute for Hospital Construction.

Should the worker be placed properly in the right job and should proper attention be given to the social requirements of the job, the worker will naturally acquire the "will to work." To deemphasize the importance of the relationship of people in the social environment of business is mere blindness for, as Elton Mayo points out, "*The central problem of our time is social.*"

Preparation must be made for and attention given to the decided change taking place in the social relationships of the business as the use of automation increases. As work changes from a *physical labor emphasis* to a *mental labor emphasis*, the formation of an entirely new set of relationships will take place. This change will create untold problems for which management and its human relations people must be prepared. People do not resist mere technical change; rather, they resist social change. They fear the possibility of unemployment when a mechanical process replaces their present activity. They fear their possible removal from the group with which they have been associated on the job. They fear that they do not have the capacity with which to cope with a new job situation. By anticipating such changes, and their consequent effects on the organizational structure, potential plans for labor usage may be planned and made known to the work force. An understanding of future changes on the part of the work force can greatly reduce its resistance to such changes.

A CLARIFICATION of the human relations staff position within the organization must occur. The fact that the filter function is everyone's job, while the technical duties of personnel are not, has led to much misunderstanding. Such misunderstanding can only be amplified with the new problems of responsibility, authority, centralization and decentralization which will occur. For example, with the establishment of purely functional communication and statistical headquarters in large businesses, the question of how much authority rests with the personnel involved in these areas will arise.

Human relations policies must be clearly defined and positive in approach for "unless Joe feels, as we do, that our system works, that it pays off to him, our glittering generalities will glitter away until they become a glimmer.[4] For example, the mere promise of training in the preparation for the shift from a physical labor emphasis to a mental labor emphasis will do little good unless such training is planned, made known to the employee and the employee *believes* that it will occur and will better his present position.

When the importance of the manager's human relations duties is completely understood, the qualification for promotion in the management realm will rely not only upon his ability in some specialized field of knowledge, but also *upon his ability to handle the human problems of those under his supervision.* His knowledge of the social sciences will be as important as his technical knowledge.

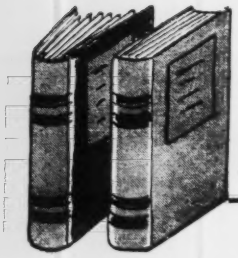
Finally, we must emphasize that if the question arises in choosing between what the manager says and what the manager does, the latter will be accepted. It still remains true that a man's actions speak louder than his words.

Conclusion

Through a brief examination of the human relations activities in the business, we have endeavored to point out that personnel and human relations are not the same. Both are positive, dynamic functions. The personnel function is concerned with the relationship of the individual to his job while the human relations function is concerned with the relationship of one individual to another.

Certainly, the very fact that the personnel staff is likely to come into contact with individuals from every functional activity of the business is just cause for stating that personnel people must be experts in practicing human relations. In fact, the personnel staff is likely to be the place in which human relations staff aid is located in the business that is not large enough to support a separate staff of experts. To say that the two activities are the same is, however, incorrect. ■

[4] *Garret L. Bergen, "Fashions, Fallacies, and Fundamentals,"* American Management Association, *Number* 132.



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PERSONNEL MANAGEMENT — Principles and Practices

By C. H. Northcott. Published by Philosophical Library, 15 E. 40th St., New York 16, N. Y. 1956 (3rd Edition). 428 pages.

IT IS indeed refreshing to come across a book on personnel administration which provides a first-class perspective on this subject.

Doctor Northcott, formerly Labour Manager of Rowntree & Co., and sometime Director of the British Institute of Personnel Management, wisely has seen fit to emphasize at the beginning of his book three items too frequently given minor if any attention in discussions of this subject. These are the place of personnel management in the business organization, its aims and principles and personnel policy. This fundamental approach to the subject establishes an excellent basis for the subsequent text on personnel management practices.

Though written in a British environment and reflecting British philosophy and practices, this book contains thought-provoking material for American business management. The chapters on "Organization and Place of Personnel Management," "Aims and Principles in Industry," "Policies and Procedures," "The Psychology of the Working Group" and "The Dynamics of Industrial Relations" provide stimulating discussion so essential to an adequate approach to this subject.

Later chapters dealing with such matters as "Joint Consultation," "Scope and Duties of a Personnel Department," "Employment," "Wage Administration," "Education" and "Health and Safety" tend to be so specific with many references to British experience and practices that they are likely to be of lesser interest to American business management. Omissions in this area of the subject are marked. No attention is given to the more recent phases of personnel management which are coming to the fore in American industry particularly those which may be grouped under the title "Management Personnel Administration" and include organization planning, management personnel appraisal, executive recruitment, management development and management compensation. The very important subject of communication is given inadequate emphasis.

The high quality of philosophy contained in this book is indicated by the following paragraph:

"Care must be taken not to confuse management with leadership.... The function of a manager is not management but managing. Management is the "set-up," the organized institution which results when the manager has played his part in managing his works. Similarly, the activity of a leader is that of leading.... The minds which reach the highest administrative posts, where organized management is their chief concern, are those which are analytical in quality, give weight mainly to objective facts, and think in terms of causation. The mind of a leader is of a different order and gives weight to other qualities. He recognizes the dynamic power of the emotions and sentiments, gives the weight of facts to human opinions and desires and can think in terms of probability, i.e. of the human reactions that are likely to follow upon his decisions and actions."

Here is a book which contains gems of real value. Like all precious items, they are found only through careful reading and thought. The book has little usefulness in terms of measures to be considered in seeking solutions to personnel and industrial relations problems. It can be very useful to those who are seeking to establish and maintain a philosophy which assures satisfactory personnel administration and employee relations.

William H. Lang
Hall & Lang
Consultants to Management
New York Cit

LABOR IN A GROWING ECONOMY

By Reder, Melvin W. John Wiley & Sons, Inc., New York, 1957.

AFTER the rash of post-war books on labor relations and labor economics which accompanied the rapid expansion of popular and student interest in the problems of industrial relations it is most interesting to sit back and contemplate the less hurried and more general exposition of

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the ubiquitous labor economics in today's society. In fact the first impression of the book is that it has adequate balance in the treatment of such diverse but closely related subjects as labor legislation, union history, and the demand for and supply of labor.

After reading the book the first impression is confirmed and a second is added. Reder has done a good job of non-partisan presentation and still portrays problems of both management and labor. It is not a "wishywashy" presentation with a constantly shifting bias but rather is factual and analytical in its study of the labor management relationship and the economics of this constantly changing but always the same phenomena of current American life.

A good presentation is made of labor union history in the United States in two chapters with the remainder of Part II devoted to union government, collective bargaining, and labor legislation. In part III the author takes up the determination of labor wage via the labor market approach and then quite competently handles the setting of wages within the firm. Usually an author does a good job on one side of this topic and a poor job, if any, on the other. Of late years it has become fashionable oftentimes to ignore the great body of economic analysis having to do with general wage determination but Reder does not fall into this trap of leaving out of proper consideration this very vital part of labor economics. He quite logically closes this section with a consideration of employment.

Part IV gives seventy pages to the "War on Poverty" which is the one section inappropriately titled as most of it consists of a description of social security and the government as wage setter. One can happily come away from the reading of this section with dry eyes instead of philosophizing on the dubious validity of the subsistence theory of wages.

His summary in Part V of the role of unions in modern society is all too short and sweet throughout a total of five pages —a very heavy dessert after such a complete meal—which one should perhaps consider as the after-dinner liqueur with which to properly evaluate what has gone before.

Frank E. Childs
Associate Prof. of Industry and Statistics
Western Reserve University
Cleveland, Ohio

Management Theory and Practice

A-16 Administrative Behavior—Herbert A. Simon. 207 pp. Macmillan. 1957. $5.00.

A new edition of a book which seems destined to become one of the classics of management theory. Based on a thorough study of business, governmental, religious and other large organizations, it focuses on the problem of how decisions are reached in such institutions. Foreword by Charles I. Barnard.

A-17 Executive Decision Making—Manley H. Jones. 503 pp. Irwin. 1957. $7.20.

A study of one of the most important and least understood functions of management at all levels—the making of decisions, gaining their acceptance, and putting them into effect. Written in clear and realistic fashion, it is designed both for students of business administration and practicing executives.

A-18 Modern Management—William V. Owen. 399 pp. Ronald. 1958. $6.00.

A rounded discussion of the nature and function of management and its relationship to broader economic problems. Worthwhile reading for anyone seriously concerned with management theory or practice.

A-19 Automation—Carl Dreher. 128 pp. Norton. 1957. $2.95.

A non-technical introduction to the basic ideas and problems of automation. Designed to explain to the ordinary reader what automation is, how it works, and how it can be usefully applied. Includes some fascinating sidelights on new types of "thinking machines" including one that is being developed to translate from one language into another.

Management Tools and Techniques

B-20 Dynamics Of Good Supervision — Eugene J. Benge. 194 pp. Vision. 1957. $12.50.

A rounded summary of up-to-date information on many of the main subjects which anyone in a management position needs to keep in mind. Written by a prominent management engineer, the coverage of the book is broader than the title indicates. Contents include organization problems; planning and control; selecting, motivating and training employees; work simplification; building morale; compensation plans; industrial relations; public relations; and basic economics as they affect management. Bound in loose leaf form and tabbed for ready reference.

B-21 How 185 Companies Control Office Turnover—Dartnell Corp. 1957. $8.75.

B-22 Working Conditions in 165 Offices — Dartnell Corp. 1957. $8.75.

Two new research reports on specific problems of office management, based on a thorough study of the actual practices of corporations. The first focuses on ways of handling office grievances and the second covers broader problems of office administration such as working hours, salary schedules, provision of benefits and general working conditions.

B-23 Selection of Management Personnel—American Management Association. 2 vols. 892 pp. 1957. $15.00.

A basic addition to management literature is provided by this comprehensive work on up-to-date principles and techniques of recruiting and selecting executive and supervisory personnel. Over 40 leading management experts have combined their experience in discussions of such factors as defining the job and its requirements; assuring an adequate number of candidates; and making the most of available selection tools and techniques. Specific testing, interviewing and merit-rating methods are explained.

B-24 Better Wage Incentives—Phil Carroll. 237 pp. McGraw-Hill. 1957. $4.75.

A distinguished consulting industrial engineer here gives practical guidance on how to set up and effectively maintain a good wage incentive program. Gives particular attention to the handling of grievances under incentive systems. Should be most helpful in efforts to make incentive wage programs achieve the desirable effects which they have in theory, but which they frequently lack in practice.

B-25 The Collective Bargaining Agreement — Fred Whitney. 127 pp. Indiana University School of Business. 1957. $2.75.

An up-to-date treatment of the specific processes and problems of negotiating and administering a collective bargaining agreement in the U.S. today. Projects this particular type of action against a general background of the current state of labor-management relations in the country.

B-26 Pioneering in Industrial Research—Kendall Birr. 211 pp. Public Affairs Press. 1957. $4.50.

The full story of the work of the General Electric Research Laboratory, one of the greatest of the research institutions which are playing an increasingly important role in American industrial and scientific progress. Focuses particularly on the work of this laboratory in the fields of electronics and nuclear power as a case history of the ways in which such institutions operate.

B-27 Human Relations In Industrial Management—Robert T. Livingston and Stanley H. Milberg, editors. 429 pp. Columbia. 1957. $8.50.

Team research is becoming an increasingly important aspect of company and national progress. This book brings together 27 papers on the human aspects of organizing such team research and keeping a harmonious working relationship within the team. Based on two conferences sponsored by Columbia University in 1955 and 1956 which brought business leaders and psychologists together to discuss this unexplored range of problems.

B-28 Practical Automation — Lester R Bittel and others. 383 pp. McGraw-Hill. 1957. $7.50.

A clear explanation of ways of planning and installing automation programs and getting them into effective operation. Covers problems in various industries and in installations of all sizes.

B-29 Installing Electronic Data Processing Systems—Richard G. Canning. 206 pp. Wiley. 1957. $6.00

A full treatment of the problems of planning, programming, installing and converting to electronic data processing; carrying through the early phases of operation; and avoiding pitfalls. Written in the language of management, this book is a valuable sequel to the author's earlier work on "Electronic Data Processing For Business and Industry."

B-30 Social Science In Public Relations — Rex F. Harlow. Harper. 1957. $3.50.

In a broad sense public relations is a concern of every executive of a large organization today. This is the first book which makes the results of recent social science research available in a practical way in terms of its applications to public relations problems. It shows how the public relations practitioner, who can benefit from having his ideas tested by scientific methods and the social scientist, who needs practical outlets for the application of his ideas, can work together to produce a new constructive result.

B-31 Motivation Research and Marketing Management—Joseph W. Newman. 539 pp. Harvard School of Business Administration. 1957. $7.50.

Another examination of the interplay between social science methods and practical business problems with particular reference to marketing. Includes case histories and specific research techniques relating to investigation of consumer attitudes and behavior.

B-32 Buildings For Industry—F. W. Dodge. 318 pp. 1957. $9.75.

An up-to-date survey of the trends in industrial building design. Shows how buildings are developed to meet the specific needs of a particular firm and gives illustrations of a number of advanced structures.

B-33 Practical Plan Protection and Policing—B. W. Gocke. 160 pp. C. C. Thomas. 1957. $4.50.

A practical survey of methods of providing physical security for industrial installations.

Personal Development

C-5 The Techniques of Executive Control—Irwin S. Schell. 300 pp. McGraw-Hill. 1957. $5.00.

A practical book which defines the tools of executive control, outlines the factors involved in successful executive-employee relations, and gives usable methods whereby an executive may measure his own procedures against a general pattern of recommended practices and discover the techniques which will make his own work more effective.

C-6 Better Report Writing—Willis H. Waldo. 238 pp. Reinhold. 1957. $4.75.

An up-to-date guide on ways of preparing more effective technical reports. Starting from the assembly of background material and down to the final form of presentation. Written by a technical editor for the Monsanto Chemical Company, this book gives valuable tips in an important area.

C-7 You Must Relax—Edmund Jacobson, M.D., 284 pp. McGraw-Hill. 1957. $4.50.

A new edition of a widely-read book that provides important guidance for everyone who must cope with the tension of present day living. Gives scientific guidance, in clear understandable language, on how to make a conscious effort to conserve your energies and get a maximum of relaxation and a minimum of strain out of any situation. Recent studies show the close relationship between failure to relax and all sorts of ailments from ulcers to heart trouble, so this book could literally be a lifesaver.

(*Continued on page* 28)

TYPICAL S.A.M CHAPTER ACTIVITIES—MAY 1958

CHAPTER	SUBJECT	SPEAKER	PLACE	DATE
Alabama	"Human Relations"	**Dr. James Brakefield,** Director of Public Relations, Liberty National Life Insurance Co., Birmingham, Ala.		13
Baltimore	Seminar on Budgetary Control 7:30 P.M.		Black & Decker	21
Binghamton	"Creative Management"	**Dr. F. F. Bradshaw,** President, Richardson, Bellows, & Co.	Carlton Hotel	14
Boston	Ladies Night			8
Bridgeport	"Utilizing Manpower"	**James O'Connell,** Under Secretary of Labor	Indian Room, Algonquin Club	6
Central Pa.	"Labor's New Code of Ethics"	**A. H. Reede,** Professor of Economics, Penn State University	Camp Hatetoleaveit	15
Charlotte	"Measurement of Management Effectiveness"	**Dr. F. F. Bradshaw,** President, Richardson, Bellows & Henry Co., Management Consultants, N. Y.	Hotel Barringer	20
Chicago	"How To Develop Financial Planning and Control as a Tool For Management"	**Walter R. Bunge,** Manager of Budgets, Inland Steel Co.	Furniture Club of America	27
	"The Use of Punched Cards in Industrial Engineering"	**Gary Feuerpfiel,** Chief Industrial Engineer, Giddings & Lewis Machine Tool Co.	Furniture Club of America	20
	"What Is New In Social Security"	**Robert Hall,** Staff Representative, U. S. Department of Health, Education and Welfare	Toffenetti's Restaurant	19
	"Operations Research Computer Application"	**Leonard Swanson,** Arthur Anderson & Co.	Hardings Presidential Grill	6
	A Review—Questions & Answers on Current Production Control Problems	Panel Discussion	Furniture Club of America	15
Columbus	"Barriers To Business Communication"	**Thomas H. Dudgeon,** Director of Publ. Rel., Nationwide Insurance Co.	Fort Hayes Hotel	1
Detroit	Plant Tour		Awrey Bakeries	1 & 3
	Annual Spring Clinic			13
Greensboro	Annual Ladies' Night		Plantation Supper Club	9
Greenville	"Improving Management Development Through Standards of Performance"	**John B. Joynt,** Vice-President, New York Central R. R., New York, N. Y.	Elks Club	19
Hartford	"Guest Night at U. Conn."		U. of Conn.	15
Hudson Valley	"Why Industry Is Moving South"	The Honorable **Charles E. Daniel,** Chairman of the Board, Daniel Construction Co.	Hot Shoppe Restaurant, Albany, N. Y.	13
Kansas City	"Selling a Materials Handling Program to Top Management"	**Paul Minnich, Jr.**	Elks Club	20
Knoxville	Ladies Night "Optimism"	**Dr. Frank J. Soday,** Vice-President of the Chemstrand Corp., Decatur, Alabama	Deane Hill Country Club	16
Lancaster	"The Analytical Method for Training Operators"	**Geoffrey Ladhams,** Personnel Consultant, N. Y., N. Y.	Hotel Brunswick	20
Lehigh Valley	Ladies Night		Walp's Restaurant, Allentown, Pa.	6
London & District	Election of Officers		Hook's Restaurant	15
Milwaukee	"Measuring the Effectiveness of Executives"	**J. B. Joynt,** Vice President Management Planning, New York Central System, New York	Engineer's Society Bldg.	8

TYPICAL S.A.M CHAPTER ACTIVITIES—MAY 1958

CHAPTER	SUBJECT	SPEAKER	PLACE	DATE
Montreal	Annual Business Meeting		Ritz-Carlton Hotel	14
Nashville	Ladies Night Tour through Ford Glass Plant		Nashville, Tenn.	8
New Haven	"Ladies Night—Annual President's Report"		Green Dolphin, Cheshire, Conn.	15
No. Alabama	"Operations Research"		Hotel Russel Erskine	14
N. E. Penna.	"Management Training Program"	Leader: **Franklin L. Hertig,** Tung-Sol Electric Co., Weatherly, Penna.	Hotel Sterling, Wilkes-Barre, Pa.	5
N. New Jersey	"Introduction to Activity Vector Analysis"	**W. V. Clark**	Essex House	1
	Annual Business Meeting		Country Club, Twin Brooks, Watchung, N. J.	16
Philadelphia	"The Architect & Management" Today's Architect—A Coordinator Plus	**Clarence S. Thalheimer,** Jack A. Thalheimer, Thalheimer & Weitz, Philadelphia		6
Pittsburgh	"Organization & Management Development"	**Frank L. McClure,** Director of Organization Development, Radio Corp. of America	Gateway Center	15
Portland	Meeting & Plant Visit—Plywood Manufacturing	**Mr. Rieten,** M. & M. Mfg. Co.	M. & M. Mfg Co.	14
	"Automatic Controlled Machining"	**Ed Pierson,** Allied Machines	Henry Thiele's	28
Poughkeepsie	"Communications"—Panel		Nelson House	13
Providence	"Development of Managers"	**John B. Joynt,** Chairman, National Board of Directors, S.A.M, New York City, N. Y.	Brown Faculty Club, Benevolent & Magee Streets	1
Raritan Valley	"Memomotion"	**Samuel W. Earle,** Manager, Management Services, Union Carbide & Carbon Corp., Newark, N. J.	Roger Smith Hotel, New Brunswick, N. J.	21
Reading	Panel Discussion — Our Members Summary of the Year's Results in Decision Making		Iris Club, Wyomissing, Penna.	12
St. Louis	Business Meeting & Annual Election of Officers	**William A. Barker,** President, S.A.M St. Louis Chapter		
Twin City	Election of Officers		Coffman Memorial Union, U. of M.	1
Washington	"Observations of the General Electric Policy on Decentralized Management"	**Donald R. Webb,** Consultant, Organization Principles and Criterial Development, General Electric Co.	Occidental Restaurant	28
Western Mass.	Spring Conference			21
W. No. Car.	Annual Meeting & Ladies Night		The Manor, Asheville, N. C.	21
Wilmington	"Management Must Plan Ahead"	**George C. Getty,** Vice President, Tidewater Oil Co.	Lord de la Warr Hotel	13
Worcester	Ladies' Night		Worcester Airport	19

Is Your Problem Overproduction—Or Underproduction Of Markets?

by Professor James G. Drury

Department of Marketing
School of Commerce
New York University
New York City

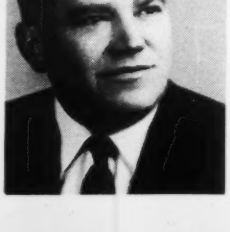
WHAT *is* marketing, anyway? With so much being written these days about the *marketing revolution*, the *age of marketing* and *marketing dynamics*, the question no longer is a semantic exercise. It is, in fact, one of the most important questions facing business. Top management no longer is primarily concerned with how to produce *goods* but with how to produce *markets*.

The president of a soap company describes his company as a marketing organization rather than a producer of soap. He says his policy is to find out what housewives want and then try to make it for them. From this statement it would appear that marketing, or a large part of it, actually precedes production of goods.

If this is the case, then American Marketing Assn.'s definition of marketing ("the performance of business activities that direct the flow of goods and services from producer to consumer or user") no longer is adequate. According to this definition, the goods would have to exist before the flow of goods could be directed.

Any analysis of marketing today shows numerous activities that precede the production of a product as well as those that follow to direct its flow. There is the area of research in consumer motivations, the study of individual choices, the search for and pre-testing of ideas for new products or new uses, product planning and the many stages of product testing. These are but a few of the marketing activities that precede the decision to start production.

Others will develop out of the anticipated expansion of automation. It will require more accurate knowledge of market potentials for several years ahead because automatic facories cannot be started and stopped without considerable cost. Marketing campaigns will have to be planned on more than a year-to-year basis. Any new definition, therefore, must be broad enough to include all these pre-production activities.



Well known as author, business consultant and lecturer in the field of Marketing, Professor Drury has taught the subject at New York University's School of Commerce for the past 30 years He received his B C.S., M.C.S., and M.A. from that university also.

Marketing—A Part Of Production

Today, the making and the marketing of goods are becoming so interwoven they are being recognized in practice for what they have always been in theory—complementary parts of the productive process. Engineering know-how produces a workable product; marketing know-how produces a salable product.

To put it another way, a product must not only be *good* but *right* from the consumer viewpoint. Production is not one thing and marketing another. The man in overalls, who produces the physical product, is no more a producer than the man in gray flannels, who produces the market.

It may make considerable difference if marketing people think of themselves as producers. Engineers, management executives, factory workers and others who produce the physical goods have respect for the word *producer*. In fact, many of them assume they are the only producers. They consider sales and advertising men as hucksters and parasites, living off goods produced by others. Even some economists, who should know

better, describe advertising as a form of economic waste.

If salesmen and advertising men think and act as producers of markets, they will gain the respect of others for their real contributions to production. To some extent this has already happened. Company management is more and more being placed in the hands of marketing executives, since the basic problem is no longer *how to make something* but *how to produce markets.*

In the past, management has thought of marketing appropriations as expenses —sales expenses, advertising expenses or sales-promotion expenses. If the producer concept of marketing prevailed, these expenses would be considered investments in the tools to produce markets. Psychologically, an investment is something to be built up, an expense is something to be cut down.

Furthermore, management has always looked with favor upon physical research as a prime source of new materials and new products. If marketers stress the fact that they are producers, marketing research should receive equal consideration as the source of new markets.

The Fallacy Of "Overproduction"

There is perhaps a more fundamental reason for recognizing marketing as part of the process of production. If markets as well as goods are produced, the theory of cycles and the inevitability of depressions are open to question. If the basic relation between supply and demand is misinterpreted, management policy decisions can have a disastrous effect on our economy.

Everything depends upon how management interprets this situation: *The supply of goods is greater than market demand.*

Does this represent overproduction of goods or does it represent underproduction of markets?

If it is considered overproduction of goods, the usual policy is to cut production, lay off workers, slash budgets, and thus pave the way for a depression. If, on the other hand it is viewed as underproduction of markets, sound policy would dictate an opposite solution to obtain a balance between supply and demand—produce more markets, hire more salesmen, increase advertising budgets. Instead of nosediving the economy into a depression, such policies lead to higher levels, more jobs, more purchasing power and more prosperity.

PRINTERS' INK estimates that American business this year will invest more than 10 billion dollars in advertising to produce markets. For a number of years some people have been waiting for a depression they feel is inevitable. Could it be that recent emphasis on the production of markets has negated the cycle theory and caused a lessening in the possibility of depression?

Of course, it is always possible to overproduce the wrong product. Television manufacturers, for example, could produce too many sets of last year's vintage, which the consumer this year would not consider the right product. Failure to use all the tools of marketing properly may cause overproduction by a company or by an industry. This appears to be a fairly common condition, since only about 20% of new products win consumer approval.

Technology Of Market Production

The process by which markets are produced parallels, in most respects, the process by which goods are produced. Raw materials, tools and men are the essential ingredients.

1. *Raw materials*

A. *Raw materials for goods* are such physical resources as minerals, chemicals and fibers. They must be analyzed and synthesized in research laboratories to discover their composition, qualities and useful properties. All of the physical sciences are involved. Out of such continuous study come new materials, new products and new uses.

B. *Raw materials for markets* are the human resources—the people. Their choices, their ability and willingness to buy and everything else about them must be analyzed and synthesized in the field laboratories of market research. All of the social sciences are involved. Out of such study come new markets for new products or new markets for known products.

It is estimated that 20 years from now more than half of the products consumers will be buying will be products that are unknown today. Out of the continuous study by industry of the vast reservoir of people's unrecognized desires will emerge an expanding group of recognized desires. To satisfy these, products will be produced. In time, some of these unrecognized desires may become needs. At one time the automobile was an unrecognized desire, then it became a recognized desire, and now for some people it is a necessity.

2. *Tools*

A. *The tools for producing goods* are the machines and formulas for making and mixing products. In this area management has, to a large extent, analyzed the tools and the skills required and has established specifications and job descriptions.

B. *The tools for producing markets* have not been as sharply defined. Perhaps this is the reason efficiency in production of markets lags so far behind the standards of efficiency achieved in the production of goods. What is salesmanship or merchandising or sales promotion? After all, they cannot be all things to all men. Perhaps the technology of marketing is too new to expect exact terminology. But sooner or later the problem must be faced. In the outline of marketing tools (see above) an

MARKETING TOOLS

What They Are

1. MARKETING RESEARCH—Application of scientific method to marketing problems.
2. MERCHANDISING—Manipulating material and physical properties to expedite acceptance of products or ideas.
3. SALESMANSHIP—Personal presentation of sales ideas about goods or services.
4. ADVERTISING — Non-personal presentation of sales ideas through media owned or controlled by others and available to competitors.
5. SALES PROMOTION—Non-personal presentation of sales ideas through media you own or control.
6. PUBLIC RELATIONS—Personal or non-personal presentation of ideas other than sales ideas through any medium to produce a favorable climate for acceptance of sales ideas.

What They Involve

Problem recognition and definition—fact gathering, analysis and conclusions.

Using location, time, amount, motion, color, light, other products or materials, to increase convenience, remove irritations and overcome resistance due to physical causes.

Speaking sales ideas to a prospect personally.

Presenting sales ideas to people in a group where you must compete for attention.

Writing sales ideas to a number of people individually.

Presenting ideas (except sales ideas) to one person, a group of people, or to a number of people individually.

Skills Required

Logical, questioning mind; passive, introvert type; enjoys statistics; analyzer.

Synthesizer, sees relationship of parts to whole, recognizes obstacles to smooth flow of goods or ideas; has imagination and manipulative skill; adaptable; creative in use of materials.

Active, extrovert type, enjoys contact with other people and travel; debater type; flexible; adaptable.

Creative, imaginative, convincing writing ability; skill to produce sales; adapt to media requirements; divert attention from competitor's advertising.

Creative, imaginative, convincing writing ability; skill to produce sales; uexibility and ingenuity in use of media.

Sincere interest in other people and their problems; ability to write in human-interest manner; story teller; diplomat.

attempt is made to establish sharp lines of distinction. If greater efficiency in market production is to be achieved, management must know what each tool is, what is involved in its use and what skills are required of those who use it.

3. *Men*

Men must make decisions and guide the production of goods and markets. Men producing goods deal with inanimate raw materials that can be measured objectively. Men producing markets, on the other hand, are dealing with living beings who cannot be measured objectively.

One group has greater understanding of *things*—the other of *people*. One strives for standardization to gain efficient use of matter—the other strives for individualization to gain wider choices for consumers. At times this causes confusion or conflict. When it is recognized that goods and markets both are produced, these two groups of men should discover their approaches are complementary, not antagonistic.

Today there exists a growing group of marketing-minded engineers and a similar group of engineering-minded marketers. Perhaps they will spark the understanding and cooperation needed to balance the production of more and more goods with the production of more and more markets. ■

(*Continued from page 23*)

C-8 The Creative Power of Mind—Willis H. Kinnear, ed. 370 pp. Prentice-Hall. 1957. $4.95.

Sub-titled: "The scientific use of your thought for abundant living," this is an interesting collection of essays by eminent scientists, religious leaders, philosophers and others on various aspects of creative thinking and its contribution to a happy and successful life.

C-9 The Modern Researcher — Jacques Barzun and Henry F. Graff. 386 pp. Harcourt. 1957. $6.00.

A guide to how to find facts, arrange them and describe them in readable English prose, which should be of considerable interest to many executives who find that this type of activity is an increasingly important part of their day to day jobs. Primarily aimed at the historical researcher, but the sections on writing techniques are relevant to any field.

The Wider View

D-6 A Pictorial History of Science and Engineering. 257 pp. Simon & Schuster. 1957. $7.95.

A graphic history of man's technological and scientific progress from the dawn of history to the present, told in over a thousand pictures with a well written, brief, explanatory text.

D-7 Public Utilities in American Capitalism—Martin G. Glaeser. 637 pp. Macmillan. 1957. $7.50.

An up-to-date treatment of the economic and legal basis of public utilities, the role they play in American life, and the developing technology on which they are based. Any executive in a public utility organization should benefit from reading this broad review of the special factors which distinguish his kind of enterprise from both other private business and from governmental operations.

D-8 Brainpower Quest—Andrew A. Freeman. 256 pp. Macmillan. 1957. $4.75.

A report on an extended discussion in which prominent scientists, industrialists, scholars, architects and educators got together to discuss ways and means of developing adequate engineering and scientific brainpower to meet America's needs. The subject is especially timely since our current shortcomings in this area have been brought home to us with such force by recent Soviet scientific achievements.

D-9 Soviet Education For Science and Technology—Alexander G. Korol. 538 pp. Wiley. 1957. $8.50.

A timely and revealing examination of the current Soviet educational structure, its purposes, methods, strengths and weaknesses. Particularly relevant when we are trying to figure out how we lost the race into space and have just waked up to the fact that the Soviet Union is producing scientists and technologists at a far higher rate than we are.

D-10 New Frontiers of Knowledge. 135 pp. Public Affairs Press. 1957. $2.75.

A symposium by a group of distinguished scientists, writers and public leaders on where we stand and where we are going in their various fields. Authors include such eminent men as John Van Neumann, Carlos Romulo and Arnold Toynbee.

D-11 Roots of Scientific Thought—Philip P. Wiener and Aaron Knowland, eds. 687 pp. Basic. 1957. $8.00

A rounded history of the development of basic ideas of scientific method and the basic concepts of various sciences from ancient times to the present. The scientific thinking of each period is projected against the cultural background of the time.

D-12 Atomic Power—Corbin Allardice and others, eds. 151 pp. Pergamon. 1957. $3.50.

A basic appraisal of the implications of atomic energy and its relationship to economic development in the world. ■

UNIVERSITY CHAPTER PERFORMANCE STANDINGS
as of February 1, 1958

The University Chapter Performance Awards Plan was developed to encourage policies, activities and procedures that strengthen the individual chapter, increase its value and service to its members, and embody good management organization, planning and control. In addition, the Plan recognizes and rewards accomplishment. Congratulations to the following:

American Univ.	3425	Univ. of Alabama	1915
Rider College	3190	Duquesne Univ.	1885
Boston College	3140	Univ. of Det.	1885
Indiana Univ.	3125	Univ. of S. Cal.	1830
LaSalle College Evening Div.	2890	Ohio State Univ.	1795
Univ. of Calif. Berkeley	2770	Alabama Polytech. Institute	1790
Babson Institute	2720	Guilford Col.	1690
Ohio Univ.	2665	Kan. State Col.	1685
Univ. of Houston	2660	Univ. of Miss.	1685
Franklin and Marshall Col.	2610	St. John's Univ.	1675
Boston Univ.	2580	Univ. of Wisc.	1665
Univ. of Conn.	2555	Tenn. Polytechnic Institute	1645
Univ. of Pitt.	2500	Georgia Inst. of Technology	1605
Univ. of Texas	2450	Rutgers Univ.	1575
Penn. Military College	2440	Univ. of Missouri	1490
Univ. of Kansas	2385	Wayne State Univ.	1430
Clarkson College of Techn'l'gy	2340	State Col. of Washington	1390
Rensselaer Polytechnic Inst.	2310	Penn. State Univ.	1360
Miss. State Col.	2302	San Diego State College	1320
Case Institute of Techn'l'gy	2245	Univ. of Penn.	1270
Univ. of Ill.	2170	Univ. of Okla.	1250
Univ. of Minn.	2150	N. Tex. State Col.	1200
Miami Univ.	2145	W. Mich. Col.	1160
Xavier Univ.	2140	Univ of Rich.	1110
Loyola Univ. at Chicago	2065	DePaul Univ.	1100
Syracuse Univ.	2040	La. State Univ.	*1025
W. Virginia Univ.	2025	Georgetown Univ.	995
Memphis State University	1970	Butler Univ.	930
L. A. State Col. (Ramona)	1938	Univ. of Cin.	*930
Univ. of Calif. (Los Angeles)	1930	Santa Maria Catholic Univ.	*810
		Geo. Washington University	*625
		Clemson Col.	*600
		Seton Hall Univ.	*315

* Represents total for one report only.

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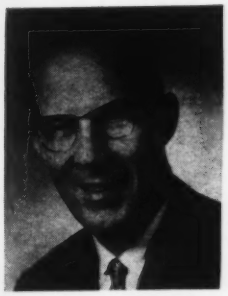
S. A. M *Newsletter*

Current news of interest to all S.A.M Members, specifically for the 900 Chapter and National Officers of the Society.



HAROLD R. BIXLER
Executive Vice President

HIGH POSITION AND RESPONSIBILITY LEVEL OF S.A.M MEMBERS. Further evidence of the increasing attainment of S.A.M objectives is shown in the last analysis of senior membership. This confirms that 36% have the position title and responsibility level of Owner, Partner, President, Executive Vice President, General Manager, one of the functional Vice Presidents, Secretary, Treasurer or Controller. Twenty-one and a half per cent are Superintendents or Division Heads, and an additional 30% are Department Heads. Thus 87½% of the senior members, excluding those individuals in professional positions, are in the top three levels of management. This provides opportunity for real management education and development.

BETTER BUSINESS RELATIONS THROUGH EMPLOYEE PUBLICATIONS. Industrial Relations Vice President Sam Burk **recommends the new U. S. Chamber of Commerce pamphlet which illustrates how employee publications have now become an established part of the business scene. One industrial editor associates their origin with "Court Circular Papers," published in China more than 2000 years ago. Only within the past fifteen to twenty years, however, have the full potentialities of employee publications for fostering good employee relations been recognized. Today more than 8000 company publications are in existence. Approximately 300 million copies are distributed in the United States each month. To produce these publications business spends more than 500 million dollars annually. Surveys show that millions of employees place their company's publication at or near the top of their list of "preferred" sources of information. One survey revealed that 82% of employees' questions believe and have confidence in what they read in their publications. Write Business Relations Department, Chamber of Commerce, U. S., Washington, D. C. for copies of this new booklet. It is designed to alert business men to the importance of employee publications in their communications' programs; and to emphasize the usefulness of such publications in creating better understanding of business and the business system. Ask also for "Helps for the Editor", which lists a number of valuable aids for the industrial editor as sources of assistance in carrying out his broad responsibilities to produce an employee publication that will effectively explain and interpret business and the American economic system to employees.**

YOU ARE KEEPING GOOD COMPANY IN S.A.M. A new S.A.M pamphlet is now available for wide distribution which lists several hundred typical firm members of the Society. It is called "Keeping Good Company in S.A.M", and indicates that no summary could confirm more clearly the growing prestige of the Society for Advancement of Management than a review of the leading companies with membership in the Society. Initial quantities are now being distributed to the Chapters, and all members are invited to obtain this new publication for membership promotion and other uses.

ANNUAL REVIEW OF 1957 BUSINESS BOOKS. The annual review of some of the outstanding business books of the year has just been released by the Business and Technology Department of the Cleveland Public Library, under the heading "Business and Technology Sources". These books reflect progress and potentialities, as well as effective practices and techniques in the business field. They are classified under such topics as "The Future Years, Accounting and Control, Advertising and Marketing, Motivation Research, Commerce in Business and Industry, The Selection and Development of Executives, How to Handle Personnel, The Investment Field, The Office in Transition, Operations Research, Statistical Methods, and Factory Management. Copies available from Jean K. Taylor, Head of Business and Technology Dept., Cleveland Public Library, Cleveland 14, Ohio. It is an excellent addition for your management reference library.

ADVANCED MANAGEMENT GETS AROUND. Questionnaire responses indicate that basic distribution of each monthly issue of the Society's official publication has over 51,000 readers. Some 33% of the copies are retained by each member; while 22% are read by two people, 16% by three, 7½% by four, 5.3% by five, and 3.1% by six people. The balance are read by as many as ten or more persons for each copy, as distributed within the company or organization. This is the basis for the recent considerable increase in requests from all sources for copies of articles published in the magazine, for permission to reprint articles, for official reference to the publication as a leading source of management information, and the voluntary submission of an increasing number of articles by authors for publication on all kinds of management subjects.

S.A.M AMBASSADOR TO EUROPE. Eugene J. Benge, **National Director of Western North Carolina S.A.M Chapter, has completed plans for an extensive trip to Europe this Fall, at the invitation of various management organizations, to conduct seminars on Management Control and Reducing Office Costs. Approximately, he will be in Stockholm 8/15-18, Oslo 8/19-20, Copenhagen 8/21-23, Amsterdam 8/24-26 Brussels 8/27-29, Munich 8/30-9/2, Vienna 9/5-8, Milan 9/22 to 10/3, Rome 10/6-10, with some side trips in between. During this period he will meet with management men and will be available for additional contacts on behalf of American individuals and companies. Advance arrangements should be made with him at McIntyre Building, Spruce and College Streets, Asheville, North Carolina.**

MANUFACTURING REMAINS THE PREDOMINANT INTEREST. Some 67% of S.A.M members represent manufacturing concerns. Other membership source classifications are: Professional Services (consultants, engineers, attorneys, architects — 6.7%); Educational Associations and Institutions — 5.6%; Government: Federal, State, Municipal or Foreign—5.5%; Public Utility — 3.0%; Commercial or Service — 2.8%; Contracting, construction and other—9.4%.

NATIONAL OFFICE MAILINGS. All 900 Chapters and National Officers are reminded to check their particular interests in the following combined mailing sent Chapter Presidents and National Directors since the last listing, and to broadcast the particular information they contain in line with their specific purposes: Minutes of National Committee Meeting, Hospital Management Conference Program, Typical S.A.M firm members ("Keeping Good Company with S.A.M" booklet), New Advanced Management Subscription Form, Chapter Meeting Data Request, Additions to Chapter Officer's "Blue Book" listings, Monograph on Chapter Meetings by First Vice President Phil Carroll, **Hospital Advisory Board Case Study No. 0902-1 on Maintenance Work Program, and Action Program of The Council for International Progress in Management.**

ADMINISTRATION IS THE MAJOR FUNCTION. A break-down of the major functional interests of S.A.M members shows that the field of Administration continues in the lead with 27.6%. This is an increase of 25% over 1953 for this function. The other individual groups are: Engineering — 17.6%; Planning, Scheduling, Control and Inspection—9.5%; Industrial, Personnel and Public Relations—9.1%; Educational 6.3%; Manufacturing-Line Operations—4.9%; Finance and Accounting—4.4%; and others such as Distribution, Office Management, Material Handling, etc., representing 20.6%.

NEW RESEARCH SURVEY ON INDUSTRIAL EDUCATIONAL PROGRAMS. Chapter Research representatives have now received basic questionnaire on a new survey being conducted by S.A.M Research and Development Division,

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covering educational programs used by manufacturing organizations to develop their line departmental management for high managerial responsibilities. This subject of research was proposed originally by the Hudson Valley Chapter, and was selected from a number of equally thoughtful projects nominated throughout the Society. The study deals with a field that is currently receiving considerable emphasis in management's long range planning. All chapters are urged to participate. The final report will show a break-down by localities; and the business organizations in each chapter locality will profit by comparing their individual programs of training with other local organizations, and with the national picture as reported by industry types and company sizes. Further details available from Dr. Vincent A. Flynn, **S.A.M National Research Director.**

NUMBER OF EMPLOYEES IN MEMBER COMPANIES. S.A.M's complete representation in the industrial and business life of the community is further illustrated by the analysis demonstrating the broad scope of functional interests which S.A.M members have, and the representation in size of company ranging from the small to the very large, as measured by number of employees. It is another evidence of the definite advantages of the exchange of know-how among management people, regardless of size of company. This principle is being widely advertised by a number of leading national corporations which point out that they are individually dependent upon thousands of smaller enterprises as their Suppliers, on one end of the line, and upon thousands of others as their distributors, on the other. The break-down shows that some 14% of S.A.M members represent companies with less than 100 employees; 21% — 100-499; 15% — 500-999; 27% —1000-4999; 15%— 500-24,999; 5%—25,000-99,999, and 3%—100,000 and over.

S.A.M MEMBERS WORLD-WIDE. S.A.M influence as an economic factor in business life now extends not only throughout the United States and in Canada, but in foreign countries as well. It is estimated that the combined attendance at S.A.M's activities of all kinds through its 200 Chapters and the National organization is over 250,000 people per year. S.A.M members are active in all the states of the U. S., with the following 10 states leading in per cent of total membership, in this order: Pennsylvania, Ohio, New York, New Jersey, California, Massachusetts, Illinois, Wisconsin, Michigan and North Carolina. Some 26 foreign countries now have S.A.M members. They include Australia, Austria, Canal Zone, Cuba, Denmark, Egypt, England, Finland, France, Germany, Holland, Iceland, India, Israel, Italy, Japan, Lebanon, Mexico, Norway, Portugal, South America, Sweden, Switzerland, Turkey, Yugoslavia and Venezuela. A number of foreign countries are interested in S.A.M Chapter development, with the first one established in Maracaibo, Venezuela, in January 1958. U. S. Chapters include Puerto Rico and Hawaii.

DO YOU JUST BELONG? Thanks to Vice President **Al N. Seares** for the following reminder. "Are you an active member, the kind that would be missed? Or are you just content that your name is on the list? Do you attend our meetings and mingle with the flock, or do you stay away and criticize and knock? Do you take an active part to help the work along, or are you satisfied to be the kind that "just belongs"? Do you pitch in and lend a hand, or do you leave the work to just a few and call them "the clique"? We've quite a program scheduled that we're sure you'll hear about, and we'll appreciate it if you, too, will help us out. Some come to the meetings regularly and help with hand and heart. Don't be just a member, but take an active part. Think this over, S.A.Mers; you know right from wrong! Be an active member and do not "just belong".

SERVICES ★ BENEFITS ★ PRIVILEGES of MEMBERSHIP in SOCIETY FOR ADVANCEMENT OF MANAGEMENT

WHAT IS S.A.M?

A non-profit educational association, the Society for Advancement of Management is the recognized professional organization of management people in industry, commerce, government and education with national, regional, and chapter activities. The Society was formed in 1936 by the merging of the Taylor Society, (organized in 1912 to forward the ideas of Frederick W. Taylor and his associates who developed the concept of scientific management) and the Society of Industrial Engineers, formed in 1917. A third organization, the Industrial Methods Society, merged with S.A.M in 1946.

WHAT ARE S.A.M's OBJECTIVES?

The objectives of the Society for Advancement of Management are to develop, through conferences, seminars, research, publications and other appropriate means, the following:

- efficiency through the study and application of scientific principles and methods of management;
- promote and accomplish the various mutual interests of management, investors, labor, government, and the public, in improved management;
- direct means whereby executives, engineers, teachers, public officials and others concerned are aided in applying scientific methods to management problems and promoting this common interest;
- inspire in manager and employee a constant adherence to the highest ethical standards for their individual and social responsibilities within their companies and in their communities.

HOW DOES S.A.M DIFFER FROM OTHER MANAGEMENT ASSOCIATIONS?

It is the **only** overall management organization which operates through local chapters on a national and regional basis. Because of its unique organization, S.A.M members have the invaluable opportunity to benefit locally through personal contact from the ideas, experiences and know-how of management people in all the functional areas.

WHAT ARE S.A.M SERVICES TO MEMBERS?

Among other S.A.M publications, members receive each year 12 issues of the Society's official publication, **Advanced Management,** which contains selected articles and ideas and is read by over 50,000 management people. In addition, members have an opportunity to participate both nationally and locally in the wide range of S.A.M management development programs which include Budget & Finance, Civic Affairs, Cost Reduction, Executive Appraisal, Industrial & Public Relations, Industrial Engineering, Management Engineering, Manufacturing & Production Control, Marketing & Distribution, Material Handling, Office Management, Personnel Administration, Quality Controls, Research & Development, and Small Business Management, among others.

WHO BELONGS TO S.A.M?

Senior Membership includes managers and executives in all functional areas from all types of business and industry, as well as government and education. Thirty-six per cent are Owner, Partner, President, Executive Vice President, General Manager, Vice President, Secretary, Treasurer or Controller. Twenty-two per cent are Superintendent or Divisional Head. Thirty per cent are Department Heads.

HOW CAN I JOIN S.A.M?

Most Members are affiliated with S.A.M through the local chapters located in the major cities. Simply complete the attached application form and drop it into the mail. We'll do the rest. If there is no chapter near you and you would like to join S.A.M on a direct membership basis, or if you would like to see a chapter organized in your community, check the appropriate boxes and we will follow through.

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University Chapter Division Expands

During this academic term, through the outstanding cooperation and effective leadership of the professors listed, the following University Chapters were chartered and are now in full operation, rendering real service to the students, the institution and the community. They all are part of a dynamic, international management education movement. Congratulations to each for this significant achievement!

Arizona State College Tempe, Arizona	Francis S. Kelly Dean G. D. Overman
Gonzaga University Spokane, Wash.	Dean R. F. McMahon
C. W. Post College of L. I. University Greenvale, N. Y.	T. Henry Murphy
Loyola College Montreal, Canada	Francis J. Hayes
McGill University Montreal, Canada	W. H. Pugsley
New York University School of Com. Accts. & Finance, New York City	John R. Beishline William M. Berliner
Okla. State Univ. Stillwater, Okla.	C. Roman
Santa Maria Catholic Univ. Ponce, Puerto Rico	Sister Marie Adalbert, P.O., Dean Mrs. Iris R. Roque
Temple University, Evening Division, Philadelphia, Pa.	Samuel T. Wilson
Univ. of Arizona Tucson, Arizona	Joseph Gill
Univ. of Arkansas Fayetteville, Ark.	Rhea H. West, Jr. Vincent E. Cangelosi Robert D. Hay
Univ. of Brit. Col. Vancouver, Canada	David C. Aird
Univ. of Georgia Athens, Ga.	Geo. M. McMannon
Univ. of Kentucky Lexington, Ky.	Joseph L. Massie O. W. Gard Clyde Irwin W. Warren Haynes
University of Tulsa Tulsa, Oklahoma	Lyle Trueblood
Univ. of Wisconsin Milwaukee Center	A. John Lindemann

Additional chapters were in the process of active organization during the month of March in the following institutions, under the stimulating and effective direction of the professors listed:

Univ. of Delaware Newark, Delaware	Charles N. Lanier
Univ. of Maryland College Park, Md.	S. J. Mueller
Univ. of No. Dak. Grand Forks, N. D.	J. H. Doty
Clark University Worcester, Mass.	Paul H. Levenson

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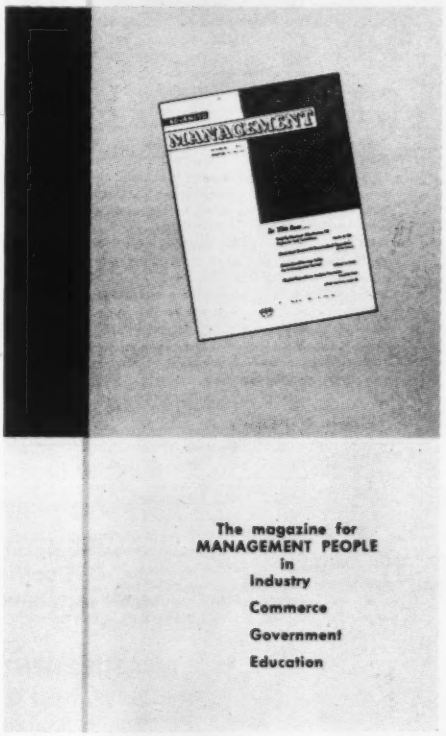

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